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Ontario and Mines

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ONTARIO MINERAL SCORE 1987

Mineral Development and Lands Branch

Parts of this report may be quoted if credit is given to the Ontario Ministry of Northern Development and Mines. It is recommended that reference to this report be made in the following form:

"1987 Ontario Mineral Score"

Ontario Ministry of Northern Development and Mines,
Mineral Development and Lands Branch

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INTRODUCTION

This is the 7th edition of Ontario Mineral SCORE prepared by the Mineral Analysis and Statistics Section of the Ontario Ministry of Northern Development and Mines to monitor the mining industry in the Province. This publication is the result of the analysis of census questionnaires which the Ministry sends annually for completion to exploration and mining companies operating in Ontario.

The importance of mining statistics was highlighted by Archibald Blue, Director of the Ontario Bureau of Mines, who stated in 1891 that:

> "Mining statistics are of first importance as without them we cannot know definitely the state and progress of an industry nor the directions in which it may be heading, nor the effect produced upon it by legislation or public policy, nor the parts of it which are weakest and most in need of help. Statistics are to industry what pulse and temperature are to the human body. They enable us to observe symptoms and suggest remedies when these are needed."

With this quote in mind we aimed at making this edition of SCORE more "user friendly". We introduced separators to facilitate reading numbers composed of four or more digits and increased spacing between rows and columns to make each number more legible. New headings now specify whether the numbers in the columns are in thousands or millions.

The preliminary figures published in previous editions of SCORE were revised to enhance accuracy. Slight numerical differences may occur between the totals and the sum of the parts due to rounding.

The Ministry of Northern Development and Mines acknowledges the assistance and cooperation provided by Statistics Canada, and Energy, Mines and Resources Canada, in compiling this data.

Should you have any questions, comments or suggestions regarding any section of SCORE, or should you need additional copies, feel free to contact:

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We hope you will find the information compiled herein useful.

John Gammon
Director
Mineral Development and Lands Branch
Mines and Minerals Division
Ontario Ministry of Northern Development and Mines

May 1988

The following symbols were used wherever applicable:

e - estimated
0 - nil or relatively small
n/a - not available or not applicable
p - preliminary
r - revised

Although the Ontario Ministry of Northern Development and Mines has made every effort to ensure the accuracy of the data appearing in this publication, it cannot assume responsibility for any inaccuracy which may occur.

EXECUTIVE SUMMARY

The total value of minerals produced in Ontario in 1987 was estimated at $5.7 billion. This represents the highest ever value of mineral production recorded in the Province. Value of mineral produced in 1987 jumped by 17.2% over the preceeding year's figure of $4.8 billion.

Ontario accounts for 15.7% of the value of all Canadian mineral production. If fuels such as coal, oil, and natural gas were excluded this percentage would jump to 35.0%. Only Alberta surpasses Ontario in value of mineral output. However, 95.0% of Alberta's value of mineral production is derived from fuel minerals.

In 1987 metallic minerals accounted for 72.4% of the value of all minerals produced in Ontario. Structural materials accounted for 21.7% of value, non metallics for 4.5% and fuels for 1.4% of total value of mineral production.

The total value of minerals produced in Ontario in 1987 and 1986 were classified as:

	1987p	1986r in millions $	%change
METALLICS	4 109.6	3 479.8	18.1
NON METALLICS	255.4	238.9	6.9
STRUCTURAL MATERIALS	1 230.6	1 025.0	20.1
FUELS	81.0	85.6	-5.4
TOTAL:	5 676.6	4 829.3	17.5

The metals contributing most to the value of output in both years were:

	1987p		1986r	
	volume	value in thousands $	volume	value in thousands $
GOLD	54 070 000 G	1 029 159	46 141 000 G	755 187
NICKEL	131 528 T	902 417	121 851 T	731 440
COPPER	280 634 T	674 643	264 413 T	534 006
URANIUM(U)	4 364 T	509 235	4 752 T	566 134

1987 marked the second consecutive year in which gold was the largest income producer among Ontario's minerals. Nickel was first runner up with copper and uranium ranking third and fourth respectively. The value of gold mining jumped by 36.3% in 1987 over the previous year while that of nickel rose by 23.4%. Copper accounted for a 26.3% increase in value while the value of uranium dropped by 10.1%.

p = preliminary
r = revised

The most recent employment statistics reveal that in 1986 slightly more than 33 000 people were directly employed in mining in Ontario. This figure includes those employed in extraction, administration, and smelting and refining. It is estimated that the metals fabricating industry employed an additional 50 000 people in the Province.

Together, all these industries closely related to mining employ more than 85 000 people in Ontario and contribute more than $8 billion annually to the provincial economy.

Total expenditures on exploration and development amounted to $358 million in 1986. This represents an increase of 25.8% over the preceeding year. The number of claims recorded in 1986 slightly exceeded the 60 000 mark.

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- Gold
- Gypsum
- Iron Ore
- Lead
- Lime
- Magnesium
- Natural Gas
- Nepheline Syenite
- Nickel
- Peat
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Total mineral production in Ontario and Canada
Total metallic and non-metallic mineral production in Ontario
Total structural materials and fuels production in Ontario
Cadmium
Calcium
Cement
Clay Products
Cobalt
Copper
Gold
Gypsum
Iron Ore
Lead
Lime
Magnesium
Natural Gas
Nepheline Syenite
Nickel
Peat
Petroleum
Platinum Group
Quartz
Salt
Sand & Gravel
Selenium
Silver
Soapstone,Talc
Stone
Sulphur
Tellurium
Uranium(U)
Zinc

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EMPLOYMENT IN THE ONTARIO MINING INDUSTRY

EMPLOYMENT AND EMPLOYEE PRODUCTIVITY IN ONTARIO

	TOTAL EMPLOY-MENT	MINE PIT,QUARRY EMPLOYMENT	MILL PLANT,KILN EMPLOYMENT	ADMIN.AND OTHER EMPLOYMENT	PRODUCTION IN 000'S TONNES	PRODUCTION PER EMPLOYEE			
						TOTAL	MINE PIT,QUARRY	MILL PLANT,KILN	ADMIN.AND OTHER
TOTAL METALLIC MINES						MILLED	PER EMPLOYEE		
1980	25 549	17 146	3 465	4 938	47 394	1 855	2 764	13 677	9 597
1981	25 808	16 746	3 784	5 278	45 019	1 744	2 688	11 897	8 529
1982	23 832	15 655	3 316	4 861	34 139	1 432	2 180	10 295	7 023
1983	21 354	13 982	3 071	4 301	36 007	1 686	2 575	11 724	8 371
1984	21 622	14 173	3 274	4 175	44 665	2 065	3 151	13 642	10 698
1985	19 891	12 918	3 019	3 954	44 201	2 222	3 421	14 640	11 178
1986	18 922	12 439	2 958	3 525	41 897	2 214	3 368	14 163	11 885
GOLD QUARTZ MINES									
1980	3 150	2 148	455	547	2 985	947	1 389	6 560	5 457
1981	3 438	2 147	702	589	2 906	845	1 353	4 139	4 933
1982	3 272	2 021	654	597	3 509	1 072	1 736	5 365	5 877
1983	3 578	2 156	767	655	3 595	1 004	1 667	4 687	5 488
1984	3 823	2 305	927	591	4 693	1 227	2 035	5 062	7 940
1985	3 599	2 173	891	535	5 216	1 449	2 400	5 853	9 749
1986	3 969	2 312	1 020	637	7 240	1 824	3 131	7 097	11 365
URANIUM MINES									
1980	4 848	2 987	641	1 220	5 808	1 198	1 944	9 061	4 760
1981	5 172	3 126	590	1 456	6 226	1 203	1 991	10 551	4 275
1982	4 860	3 157	489	1 214	6 953	1 430	2 202	14 219	5 727
1983	4 642	3 153	424	1 065	6 296	1 356	1 996	14 849	5 911
1984	4 937	3 431	444	1 062	7 000	1 417	2 040	15 765	6 591
1985	4 684	3 305	400	979	6 527	1 393	1 974	16 318	6 667
1986	4 303	3 374	340	589	6 257	1 454	1 854	18 401	10 622
IRON MINES									
1980	2 261	989	872	400	17 260	7 633	17 451	19 793	43 149
1981	2 168	886	861	421	16 857	7 775	19 025	19 578	40 040
1982	1 716	613	731	372	11 427	6 659	18 641	15 632	30 718
1983	1 512	565	590	357	10 682	7 064	18 905	18 104	29 920
1984	1 592	599	662	331	12 662	7 953	21 138	19 127	38 254
1985	1 476	516	645	315	12 055	8 167	23 362	18 689	38 269
1986	1 240	339	559	342	9 739	7 853	28 727	17 421	28 475

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

EMPLOYMENT AND EMPLOYEE PRODUCTIVITY IN ONTARIO

	TOTAL EMPLOYMENT	MINE PIT,QUARRY EMPLOYMENT	MILL PLANT,KILN EMPLOYMENT	ADMIN.AND OTHER EMPLOYMENT	PRODUCTION IN 000'S TONNES	PRODUCTION PER EMPLOYEE			
						TOTAL	MINE PIT,QUARRY	MILL PLANT,KILN	ADMIN.AND OTHER
COPPER-GOLD-SILVER M						MILLED	PER EMPLOYEE		
1980	3 349	1 926	576	847	7 629	2 278	3 961	13 245	9 007
1981	3 427	1 872	749	806	6 964	2 032	3 720	9 298	8 640
1982	3 231	1 795	645	791	6 521	2 018	3 632	10 109	8 243
1983	2 923	1 643	575	705	6 326	2 164	3 850	11 001	8 972
1984	2 895	1 652	536	707	6 587	2 275	3 987	12 289	9 316
1985	2 676	1 535	455	686	6 444	2 408	4 197	14 162	9 393
1986	2 574	1 481	453	640	6 625	2 573	4 473	14 623	10 350
NICKEL-COPPER MINES									
1980	11 704	8 952	885	1 867	13 557	1 158	1 514	15 318	7 261
1981	11 384	8 559	856	1 969	11 944	1 049	1 395	13 953	6 066
1982	10 558	7 937	773	1 848	5 615	531	707	7 264	3 038
1983	8 515	6 333	700	1 482	9 020	1 059	1 424	12 885	6 086
1984	8 202	6 061	691	1 450	13 671	1 666	2 255	19 784	9 428
1985	7 338	5 310	614	1 414	13 905	1 894	2 618	22 647	9 834
1986	6 732	4 861	586	1 285	12 036	1 787	2 475	20 538	9 366
SILVER-COBALT MINES									
1980	237	144	36	57	155	654	1 076	4 306	2 719
1981	219	156	26	37	122	557	783	4 699	3 302
1982	195	132	24	39	114	583	861	4 738	2 916
1983	184	132	15	37	88	477	665	5 858	2 375
1984	173	125	14	34	52	302	418	3 735	1 538
1985	118	79	14	25	54	455	680	3 838	2 149
1986	104	72	0	32	0	0	0	0	0
TOTAL NON-METALLIC M						MINED	PER EMPLOYEE		
1980	1 102	619	314	169	6 509	5 906	10 516	20 730	38 517
1981	1 114	625	321	168	5 757	5 167	9 210	17 933	34 265
1982	1 078	603	294	181	5 975	5 542	9 909	20 323	33 012
1983	1 138	663	289	186	6 483	5 696	9 778	22 432	34 854
1984	1 195	725	278	192	7 541	6 310	10 401	27 125	39 276
1985	1 149	672	306	171	6 846	5 958	10 187	22 371	40 034
1986	1 217	731	294	192	7 541	6 196	10 316	25 649	39 276

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

EMPLOYMENT AND EMPLOYEE PRODUCTIVITY IN ONTARIO

	TOTAL EMPLOY-MENT	MINE PIT,QUARRY EMPLOYMENT	MILL PLANT,KILN EMPLOYMENT	ADMIN.AND OTHER EMPLOYMENT	PRODUCTION IN 000'S TONNES	PRODUCTION PER EMPLOYEE			
						TOTAL	MINE PIT,QUARRY	MILL PLANT,KILN	ADMIN.AND OTHER
PEAT BOG						HARVESTED	PER EMPLOYEE		
1980	42	12	24	6	6	148	519	259	1 039
1981	35	8	23	4	7	189	831	289	1 662
1982	33	8	21	4	4	136	561	214	1 123
1983	34	7	23	4	6	168	816	248	1 429
1984	35	7	24	4	5	156	781	228	1 368
1985	30	7	19	4	5	175	752	277	1 316
1986	30	8	18	4	5	155	581	258	1 162
GYPSUM MINES						MINED	PER EMPLOYEE		
1980	165	123	20	22	781	4 730	6 345	39 026	35 478
1981	161	120	20	21	685	4 255	5 709	34 254	32 623
1982	126	88	20	18	470	3 728	5 338	23 487	26 097
1983	152	117	17	18	875	5 757	7 479	51 475	48 615
1984	184	146	19	19	1 199	6 515	8 210	63 092	63 092
1985	184	138	20	26	1 100	5 979	7 972	55 007	42 313
1986	215	169	20	26	1 324	6 158	7 835	66 207	50 928
TALC & SOAPSTONE M									
1980	59	13	37	9	66	1 121	5 089	1 788	7 351
1981	59	11	35	13	80	1 358	7 286	2 289	6 165
1982	70	12	41	17	86	1 225	7 147	2 091	5 044
1983	78	12	46	20	83	1 064	6 920	1 805	4 152
1984	91	12	55	24	115	1 262	9 575	2 089	4 787
1985	119	29	69	21	102	855	3 510	1 475	4 847
1986	115	31	60	24	208	1 811	6 721	3 472	8 682
FELDSPAR & QUARTZ M									
1980	331	56	217	58	1 234	3 728	22 038	5 687	21 278
1981	330	57	216	57	1 308	3 963	22 943	6 054	22 943
1982	290	47	188	55	1 058	3 648	22 512	5 628	19 238
1983	288	50	183	55	1 175	4 078	23 493	6 419	21 357
1984	263	48	162	53	1 217	4 625	25 343	7 509	22 952
1985	269	48	178	43	961	3 570	20 010	5 396	22 337
1986	270	48	176	46	1 002	3 712	20 881	5 694	21 789

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

EMPLOYMENT AND EMPLOYEE PRODUCTIVITY IN ONTARIO

	TOTAL EMPLOY-MENT	MINE PIT,QUARRY EMPLOYMENT	MILL PLANT,KILN EMPLOYMENT	ADMIN.AND OTHER EMPLOYMENT	PRODUCTION IN 000'S TONNES	PRODUCTION PER EMPLOYEE			
						TOTAL	MINE PIT,QUARRY	MILL PLANT,KILN	ADMIN.AND OTHER
SALT MINES						MINED	PER EMPLOYEE		
1980	486	411	8	67	4 414	9 083	10 740	551 806	65 887
1981	494	419	8	67	3 663	7 415	8 742	457 882	54 672
1982	528	438	8	82	4 347	8 233	9 924	543 393	53 013
1983	558	466	8	84	4 335	7 769	9 303	541 929	51 612
1984	593	499	8	86	4 991	8 416	10 001	623 846	58 032
1985	515	436	8	71	4 660	9 048	10 688	582 521	65 636
1986	550	458	8	84	4 986	9 064	10 885	623 190	59 351
MISC. NON-METAL M									
1980	19	4	8	7	8	415	1 973	986	1 127
1981	35	10	19	6	14	397	1 391	732	2 319
1982	31	10	16	5	10	320	993	620	1 986
1983	28	11	12	5	9	320	815	747	1 794
1984	29	13	10	6	14	469	1 048	1 362	2 271
1985	32	14	12	6	18	559	1 277	1 490	2 981
1986	37	17	12	8	16	443	965	1 367	2 051
TOTAL STONE QUARRIES									
1980	1 388	967	75	346	36 304				
1981	1 468	866	206	396	37 545				
1982	1 208	761	101	346	28 461				
1983	1 200	817	90	293	33 831				
1984	1 378	942	82	354	41 387				
1985	1 348	1 009	43	296	45 853				
1986	1 776	1 149	191	436	53 439				
GRANITE QUARRIES									
1980	57	49		8	1 456				
1981	138	28	72	38	1 739				
1982	132	22	71	39	1 546				
1983	155	39	81	35	1 041				
1984	170	56	74	40	1 730				
1985	148	130		18	2 520				
1986	141	38	72	31	1 364				

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

EMPLOYMENT AND EMPLOYEE PRODUCTIVITY IN ONTARIO

	TOTAL EMPLOYMENT	MINE PIT,QUARRY EMPLOYMENT	MILL PLANT,KILN EMPLOYMENT	ADMIN.AND OTHER EMPLOYMENT	PRODUCTION IN 000'S TONNES	PRODUCTION PER EMPLOYEE			
						TOTAL	MINE PIT,QUARRY	MILL PLANT,KILN	ADMIN.AND OTHER
LIMESTONE QUARRIES									
1980	1 326	915	75	336	34 817				
1981	1 317	826	134	357	35 568				
1982	1 059	727	30	302	26 737				
1983	1 002	746	9	247	31 962				
1984	1 148	842	8	298	38 808				
1985	1 165	849	43	273	42 281				
1986	1 578	1 063	119	396	50 819				
MARBLE QUARRIES									
1980	0	0		0	0				
1981	4	4		0	90				
1982	5	4		1	148				
1983	4	3		1	91				
1984	24	17		7	105				
1985	1	1		0	190				
1986	11	9		2	189				
SANDSTONE QUARRIES									
1980	3	2		1	4				
1981	4	4		0	4				
1982	9	6		3	5				
1983	11	7		4	5				
1984	8	5		3	6				
1985	3	3		0	5				
1986	8	7		1	58				
SHALE QUARRIES									
1980	2	1		1	27				
1981	5	4		1	144				
1982	3	2		1	25				
1983	28	22		6	732				
1984	26	21		5	738				
1985	29	25		4	857				
1986	36	31		5	1 009				

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

EMPLOYMENT AND EMPLOYEE PRODUCTIVITY IN ONTARIO

	TOTAL EMPLOY-MENT	MINE PIT,QUARRY EMPLOYMENT	MILL PLANT,KILN EMPLOYMENT	ADMIN.AND OTHER EMPLOYMENT	PRODUCTION IN 000'S TONNES	PRODUCTION PER EMPLOYEE			
						TOTAL	MINE PIT,QUARRY	MILL PLANT,KILN	ADMIN.AND OTHER
SLATE QUARRIES									
1980	N/A	N/A		N/A	N/A				
1981	N/A	N/A		N/A	N/A				
1982	N/A	N/A		N/A	N/A				
1983	N/A	N/A		N/A	N/A				
1984	2	1		1	0				
1985	2	1		1	0				
1986	2	1		1	0				
SAND AND GRAVEL PITS									
1980	1 090	444	14	632	22 427				
1981	1 159	529	22	608	28 951				
1982	916	376	5	535	19 313				
1983	898	410	18	470	20 335				
1984	728	421	19	288	23 330				
1985	1 177	527	36	614	27 269				
1986	2 233	1 421	100	712	71 507				
GRAND TOTAL									
! 1980	31 129	19 176	3 868	6 085	112 634				
! 1981	31 549	18 766	4 333	6 450	117 272				
! 1982	29 034	17 395	3 716	5 923	87 888				
! 1983	26 590	15 872	3 468	5 250	96 656				
! 1984	26 923	16 261	3 653	5 009	116 923				
! 1985	25 565	15 126	3 404	5 035	124 169				
1986	24 148	15 740	3 543	4 865	174 384				

! TOTAL EMPLOYMENT INCLUDES 2000 EMPLOYEES FROM SMALL S & G AND STONE INDUSTRIES.

NOTE: PRODUCTION FOR SAND & GRAVEL FROM 1980 - 1985 DOES NOT INCLUDE SMALL OPERATIONS.
PRODUCTION FOR SAND & GRAVEL IN 1986 REPRESENTS 84% OF TOTAL AGGREGATE PRODUCTION.
PRODUCTION FOR METALLIC AND NON-METALLIC MINES REFER TO ORE MILLED OR MINED.
EMPLOYMENT AND EMPLOYEE PRODUCTIVITY FOR SALT MINES EXCLUDES ALL 4 BRINING WELLS.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

VOLUME AND VALUE OF PRODUCTION
BY
GEOGRAPHIC DIVISIONS

VOLUME AND VALUE OF ONTARIO MINERAL COMMODITY PRODUCTION IN 1986

MUNICIPALITY	MINERAL COMMODITY	UNIT OF VOLUME	VOLUME IN 000'S	$ VALUE IN 000'S
COUNTY OF BRANT	NATURAL GAS	CU.M	382	49
	SAND & GRAVEL	TONNE	1 571	5 917
				5 966
COUNTY OF BRUCE	SAND & GRAVEL	TONNE	1 041	1 619
	STONE	TONNE	77	2 059
				3 678
COUNTY OF DUFFERIN	SAND & GRAVEL	TONNE	1 125	3 067
				3 067
COUNTY OF ELGIN	CLAY IN FLUE LINING	M	340	3 511
	CLAY IN SEWER PIPE	M	32	244
	CLAY IN TILE	TILE	2	2
	NATURAL GAS	CU.M	67 292	8 692
	PETROLEUM	CU.M	22	2 763
	SAND & GRAVEL	TONNE	715	1 645
				16 857
COUNTY OF ESSEX	LIME	TONNE	346	20 088
	PETROLEUM	CU.M	50	6 398
	SALT	TONNE	2 881	69 896
	SAND & GRAVEL	TONNE	330	1 129
	STONE	TONNE	1 916	6 849
				104 360
COUNTY OF FRONTENAC	SAND & GRAVEL	TONNE	219	448
	STONE	TONNE	701	2 287
	TREMOLITE	TONNE	0	65
				2 800

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

VOLUME AND VALUE OF ONTARIO MINERAL COMMODITY PRODUCTION IN 1986

MUNICIPALITY	MINERAL COMMODITY	UNIT OF VOLUME	VOLUME IN 000'S	$ VALUE IN 000'S
COUNTY OF GREY	SAND & GRAVEL	TONNE	1 303	2 698
	STONE	TONNE	204	2 103
				4 801
COUNTY OF HASTINGS	SAND & GRAVEL	TONNE	615	820
	STONE	TONNE	314	1 138
	TALC	TONNE	25	3 347
				5 305
COUNTY OF HURON	NATURAL GAS	CU.M	9 007	1 163
	PETROLEUM	CU.M	0	6
	SALT	TONNE	2 582	72 358
	SAND & GRAVEL	TONNE	1 912	3 963
				77 490
COUNTY OF KENT	CLAY IN TILE	TILE	1 039	277
	NATURAL GAS	CU.M	123 876	16 001
	PETROLEUM	CU.M	16	2 043
	SAND & GRAVEL	TONNE	527	2 442
				20 763
COUNTY OF LAMBTON	NATURAL GAS	CU.M	73 542	9 499
	PETROLEUM	CU.M	44	5 581
	SALT	TONNE	777	5 432
	SAND & GRAVEL	TONNE	398	894
				21 406
COUNTY OF LANARK	SAND & GRAVEL	TONNE	419	765
	STONE	TONNE	191	7 665
				8 430

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

VOLUME AND VALUE OF ONTARIO MINERAL COMMODITY PRODUCTION IN 1986

MUNICIPALITY	MINERAL COMMODITY	UNIT OF VOLUME	VOLUME IN 000'S	$ VALUE IN 000'S
COUNTY OF LENNOX AND ADDINGTON	CEMENT	TONNE	696	43 838
	SAND & GRAVEL	TONNE	200	428
	STONE	TONNE	1 057	3 051
				47 317
COUNTY OF MIDDLESEX	CLAY IN TILE	TILE	2 700	680
	PETROLEUM	CU.M	3	445
	SAND & GRAVEL	TONNE	5 244	17 751
				18 876
COUNTY OF NORTHUMBERLAND	SAND & GRAVEL	TONNE	1 733	3 463
	STONE	TONNE	2 753	3 930
				7 393
COUNTY OF OXFORD	CEMENT	TONNE	494	43 005
	GYPSUM	TONNE	186	3 285
	LIME	TONNE	690	37 700
	NATURAL GAS	CU.M	5 279	682
	PETROLEUM	CU.M	1	107
	SAND & GRAVEL	TONNE	1 115	2 802
	STONE	TONNE	2 584	13 017
				100 598
COUNTY OF PERTH	CEMENT	TONNE	573	40 788
	SAND & GRAVEL	TONNE	517	1 908
	STONE	TONNE	584	729
				43 425
COUNTY OF PETERBOROUGH	MAGNETITE	TONNE	2	26
	NEPHELINE SYENITE	TONNE	467	19 848
	SAND & GRAVEL	TONNE	1 843	4 863
	STONE	TONNE	507	6 666
				31 403

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

VOLUME AND VALUE OF ONTARIO MINERAL COMMODITY PRODUCTION IN 1986

MUNICIPALITY	MINERAL COMMODITY	UNIT OF VOLUME	VOLUME IN 000'S	$ VALUE IN 000'S
COUNTY OF PRINCE EDWARD	CEMENT	TONNE	993	64 335
	SAND & GRAVEL	TONNE	79	246
	STONE	TONNE	1 507	919
				65 500
COUNTY OF RENFREW	CALCIUM	KG	312	3 743
	LIME	TONNE	46	2 683
	MAGNESIUM	KG	8 748	41 001
	SAND & GRAVEL	TONNE	1 237	3 286
	STONE	TONNE	234	5 824
	STRONTIUM	KG	126	3 423
				59 960
COUNTY OF SIMCOE	CLAY IN OTHER PRODCT	N/A	N/A	10
	SAND & GRAVEL	TONNE	4 760	12 392
	STONE	TONNE	4 626	22 505
				34 907
COUNTY OF VICTORIA	SAND & GRAVEL	TONNE	4 774	12 120
	STONE	TONNE	1 189	5 894
				18 014
COUNTY OF WELLINGTON	CLAY IN BRICK	BRICK	1 046	262
	CLAY IN OTHER PRODCT	N/A	N/A	151
	CLAY IN TILE	TILE	2 100	529
	LIME	TONNE	81	5 463
	NATURAL GAS	CU.M	1 236	160
	SAND & GRAVEL	TONNE	4 372	14 610
	STONE	TONNE	330	1 229
				22 404
DISTRICT OF ALGOMA	IRON ORE	TONNE	1 186	50 007

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

VOLUME AND VALUE OF ONTARIO MINERAL COMMODITY PRODUCTION IN 1986

MUNICIPALITY	MINERAL COMMODITY	UNIT OF VOLUME	VOLUME IN 000'S	$ VALUE IN 000'S
DISTRICT OF ALGOMA	LIME	TONNE	234	15 164
	SAND & GRAVEL	TONNE	1 381	2 379
	STONE	TONNE	983	6 191
	URANIUM,YTTRIUM	KG	4 754	566 198
				----------
				639 939

DISTRICT OF COCHRANE	CADMIUM	KG	595	2 275
	COPPER	KG	104 619	207 706
	GOLD	G	12 641	204 795
	LEAD	KG	1 971	1 342
	LIZARDITE FILLER	TONNE	4	685
	SAND & GRAVEL	TONNE	2 027	3 022
	SELENIUM	KG	130	1 812
	SILVER	KG	199	50 164
	STONE	TONNE	27	184
	SULPHUR	TONNE	165	11 058
	TALC	TONNE	30	7 177
	ZINC	KG	165 989	201 677
				----------
				691 897

DISTRICT OF KENORA	GOLD	G	9 198	151 300
	IRON ORE	TONNE	274	9 021
	SAND & GRAVEL	TONNE	1 275	2 546
	SILVER	KG	1	222
	STONE	TONNE	451	5 313
				----------
				168 402

DISTRICT OF MANITOULIN	QUARTZ	TONNE	304	9 229
	SAND & GRAVEL	TONNE	163	437
	STONE	TONNE	1 178	4 350
				----------
				14 016

DISTRICT OF NIPISSING	IRON ORE	TONNE	1 028	61 437

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

VOLUME AND VALUE OF ONTARIO MINERAL COMMODITY PRODUCTION IN 1986

MUNICIPALITY	MINERAL COMMODITY	UNIT OF VOLUME	VOLUME IN 000'S	$ VALUE IN 000'S
DISTRICT OF NIPISSING	SAND & GRAVEL	TONNE	831	2 138
				63 575
DISTRICT OF PARRY SOUND	SAND & GRAVEL	TONNE	1 151	2 799
	STONE	TONNE	2	159
				2 958
DISTRICT OF RAINY RIVER	SAND & GRAVEL	TONNE	476	1 730
				1 730
DISTRICT OF SUDBURY	COPPER	KG	128	262
	GOLD	G	1 199	19 687
	QUARTZ	TONNE	0	0
	SAND & GRAVEL	TONNE	822	1 616
	SILVER	KG	0	80
	STONE	TONNE	482	2 289
				23 934
DISTRICT OF THUNDER BAY	CADMIUM	KG	165	629
	COPPER	KG	21 435	43 770
	GEMSTONES	TONNE	0	198
	GOLD	G	17 212	282 915
	LEAD	KG	4 094	2 788
	SAND & GRAVEL	TONNE	3 413	9 143
	SILVER	KG	112	28 338
	STONE	TONNE	478	1 732
	SULPHUR	TONNE	33	2 215
	ZINC	KG	119 463	145 147
				516 875
DISTRICT OF TIMISKAMING	BARITE	TONNE	10	2 000
	COPPER	KG	0	0

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

VOLUME AND VALUE OF ONTARIO MINERAL COMMODITY PRODUCTION IN 1986

MUNICIPALITY	MINERAL COMMODITY	UNIT OF VOLUME	VOLUME IN 000'S	$ VALUE IN 000'S
DISTRICT OF TIMISKAMING	GOLD	G	4 160	68 074
	IRON ORE	TONNE	971	56 023
	SAND & GRAVEL	TONNE	962	2 229
	SILVER	KG	4	1 051
				----------
				129 377

DM OF MUSKOKA	SAND & GRAVEL	TONNE	686	1 079
				----------
				1 079

PROVISIONAL COUNTY OF HALIBURTON	SAND & GRAVEL	TONNE	275	189
	STONE	TONNE	7	253

				442

RM OF DURHAM	CEMENT	TONNE	456	34 391
	SAND & GRAVEL	TONNE	8 846	30 691
	STONE	TONNE	1 186	1 415
				----------
				66 497

RM OF HALDIMAND-NORFOLK	GYPSUM	TONNE	1 135	13 689
	NATURAL GAS	CU.M	246 697	31 866
	SAND & GRAVEL	TONNE	838	2 844
	STONE	TONNE	878	3 881
				----------
				52 280

RM OF HALTON	CLAY IN BRICK	BRICK	85 758	18 776
	CLAY IN OTHER PRODCT	N/A	N/A	649
	CLAY IN TILE	TILE	1	1
	LIME	TONNE	193	15 243
	SAND & GRAVEL	TONNE	2 343	7 965
	STONE	TONNE	12 658	61 581
				----------
				104 215

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

VOLUME AND VALUE OF ONTARIO MINERAL COMMODITY PRODUCTION IN 1986

MUNICIPALITY	MINERAL COMMODITY	UNIT OF VOLUME	VOLUME IN 000'S	$ VALUE IN 000'S
RM OF HAMILTON-WENTWORTH	CLAY IN BRICK	BRICK	8 962	1 973
	SAND & GRAVEL	TONNE	118	508
	STONE	TONNE	3 506	17 669
				20 150
RM OF NIAGARA	NATURAL GAS	CU.M	1 208	156
	PEAT	TONNE	5	785
	SAND & GRAVEL	TONNE	804	4 361
	STONE	TONNE	4 076	21 245
				26 547
RM OF OTTAWA-CARLETON	CLAY IN BRICK	BRICK	46 348	10 220
	SAND & GRAVEL	TONNE	1 597	5 245
	STONE	TONNE	5 555	18 527
				33 992
RM OF PEEL	CEMENT	TONNE	1 633	102 664
	CLAY IN BRICK	BRICK	314 045	70 782
	SAND & GRAVEL	TONNE	6 498	26 150
	STONE	TONNE	953	3 779
	SULPHUR	TONNE	0	41
				203 416
RM OF SUDBURY	COBALT	KG	2 012	40 323
	COPPER	KG	138 231	282 268
	GOLD	G	1 731	28 418
	NICKEL	KG	121 851	731 440
	PLATINUM GROUP	KG	11	180 232
	SAND & GRAVEL	TONNE	1 545	3 473
	SELENIUM	KG	34	579
	SILVER	KG	45	11 347
	SULPHUR	TONNE	262	17 548
	TELLURIUM	KG	10	355
				1 295 983

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

VOLUME AND VALUE OF ONTARIO MINERAL COMMODITY PRODUCTION IN 1986

MUNICIPALITY	MINERAL COMMODITY	UNIT OF VOLUME	VOLUME IN 000'S	$ VALUE IN 000'S
RM OF WATERLOO	SAND & GRAVEL	TONNE	5 389	13 347
				13 347
RM OF YORK	SAND & GRAVEL	TONNE	6 199	20 152
				20 152
UC OF LEEDS AND GRENVILLE	SAND & GRAVEL	TONNE	1 278	3 457
	STONE	TONNE	650	2 960
				6 417
UC OF PRESCOTT AND RUSSELL	SAND & GRAVEL	TONNE	59	113
	STONE	TONNE	571	1 784
				1 897
UC OF STORMONT, DUNDAS AND GLENGARRY	SAND & GRAVEL	TONNE	484	1 298
	STONE	TONNE	1 022	4 220
				5 518
GRAND TOTAL				4 829 355

NOTE: THE VALUE OF LIME + CEMENT EXCLUDE THE VALUE OF STONE USED TO PRODUCE THE LIME + CEMENT.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

VOLUME AND VALUE OF PRODUCTION
BY
MINING DIVISIONS

VOLUME AND VALUE OF ONTARIO MINERAL COMMODITY PRODUCTION IN 1986

MINING DIVISION	MINERAL COMMODITY	UNIT OF VOLUME	VOLUME IN 000'S	$ VALUE IN 000'S
KENORA	SAND & GRAVEL	TONNE	1 065	1 669
	STONE	TONNE	451	5 313
				6 982
LARDER LAKE	BARITE	TONNE	10	2 000
	COPPER	KG	0	0
	GOLD	G	4 160	68 074
	IRON ORE	TONNE	971	56 023
	LIZARDITE FILLER	TONNE	4	685
	SAND & GRAVEL	TONNE	1 977	3 749
	SILVER	KG	4	1 051
				131 582
PATRICIA	COPPER	KG	3 773	7 705
	GOLD	G	169	2 773
	LEAD	KG	3 529	2 403
	SAND & GRAVEL	TONNE	332	1 408
	SILVER	KG	74	18 803
	SULPHUR	TONNE	15	993
	ZINC	KG	66 479	80 773
				114 858
PORCUPINE	CADMIUM	KG	595	2 275
	COPPER	KG	104 619	207 706
	GOLD	G	12 641	204 795
	LEAD	KG	1 971	1 342
	SAND & GRAVEL	TONNE	1 448	2 187
	SELENIUM	KG	130	1 812
	SILVER	KG	199	50 164
	STONE	TONNE	509	2 473
	SULPHUR	TONNE	165	11 058
	TALC	TONNE	30	7 177
	ZINC	KG	165 989	201 677
				692 666

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

VOLUME AND VALUE OF ONTARIO MINERAL COMMODITY PRODUCTION IN 1986

MINING DIVISION	MINERAL COMMODITY	UNIT OF VOLUME	VOLUME IN 000'S	$ VALUE IN 000'S
RED LAKE	GOLD	G	9 198	151 300
	IRON ORE	TONNE	274	9 021
	SAND & GRAVEL	TONNE	296	113
	SILVER	KG	1	222
				160 656
SAULT STE MARIE	GOLD	G	1 101	18 079
	IRON ORE	TONNE	1 186	50 007
	LIME	TONNE	234	15 164
	SAND & GRAVEL	TONNE	1 106	1 942
	SILVER	KG	0	66
	STONE	TONNE	983	6 191
	URANIUM,YTTRIUM	KG	4 754	566 198
				657 647
SOUTHERN ONT	CALCIUM	KG	312	3 743
	CEMENT	TONNE	4 843	329 021
	CLAY IN BRICK	BRICK	456 160	102 013
	CLAY IN FLUE LINING	M	340	3 511
	CLAY IN OTHER PRODCT	N/A	N/A	809
	CLAY IN SEWER PIPE	M	32	244
	CLAY IN TILE	TILE	5 843	1 489
	GYPSUM	TONNE	1 321	16 974
	LIME	TONNE	1 357	81 177
	MAGNESIUM	KG	8 748	41 001
	MAGNETITE	TONNE	2	26
	NATURAL GAS	CU.M	528 519	68 269
	NEPHELINE SYENITE	TONNE	467	19 848
	PEAT	TONNE	5	785
	PETROLEUM	CU.M	136	17 343
	SALT	TONNE	6 240	147 686
	SAND & GRAVEL	TONNE	72 601	219 361
	STONE	TONNE	49 733	222 919
	STRONTIUM	KG	126	3 423
	SULPHUR	TONNE	0	41
	TALC	TONNE	25	3 347

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

VOLUME AND VALUE OF ONTARIO MINERAL COMMODITY PRODUCTION IN 1986

MINING DIVISION	MINERAL COMMODITY	UNIT OF VOLUME	VOLUME IN 000'S	$ VALUE IN 000'S
SOUTHERN ONT	TREMOLITE	TONNE	0	65
				1 283 095
SUDBURY	COBALT	KG	2 012	40 323
	COPPER	KG	138 359	282 530
	GOLD	G	1 829	30 026
	IRON ORE	TONNE	1 028	61 437
	NICKEL	KG	121 851	731 440
	PLATINUM GROUP	KG	11	180 232
	QUARTZ	TONNE	304	9 230
	SAND & GRAVEL	TONNE	3 216	7 528
	SELENIUM	KG	34	579
	SILVER	KG	45	11 361
	STONE	TONNE	1 283	4 770
	SULPHUR	TONNE	262	17 548
	TELLURIUM	KG	10	355
				1 377 359
THUNDER BAY	CADMIUM	KG	165	629
	COPPER	KG	17 662	36 065
	GEMSTONES	TONNE	0	198
	GOLD	G	17 043	280 142
	LEAD	KG	565	384
	SAND & GRAVEL	TONNE	3 472	10 228
	SILVER	KG	38	9 536
	STONE	TONNE	478	1 732
	SULPHUR	TONNE	18	1 222
	ZINC	KG	52 983	64 375
				404 511
GRAND TOTAL				4 829 356

NOTE: THE VALUE OF LIME + CEMENT EXCLUDE THE VALUE OF STONE USED TO PRODUCE THE LIME + CEMENT.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

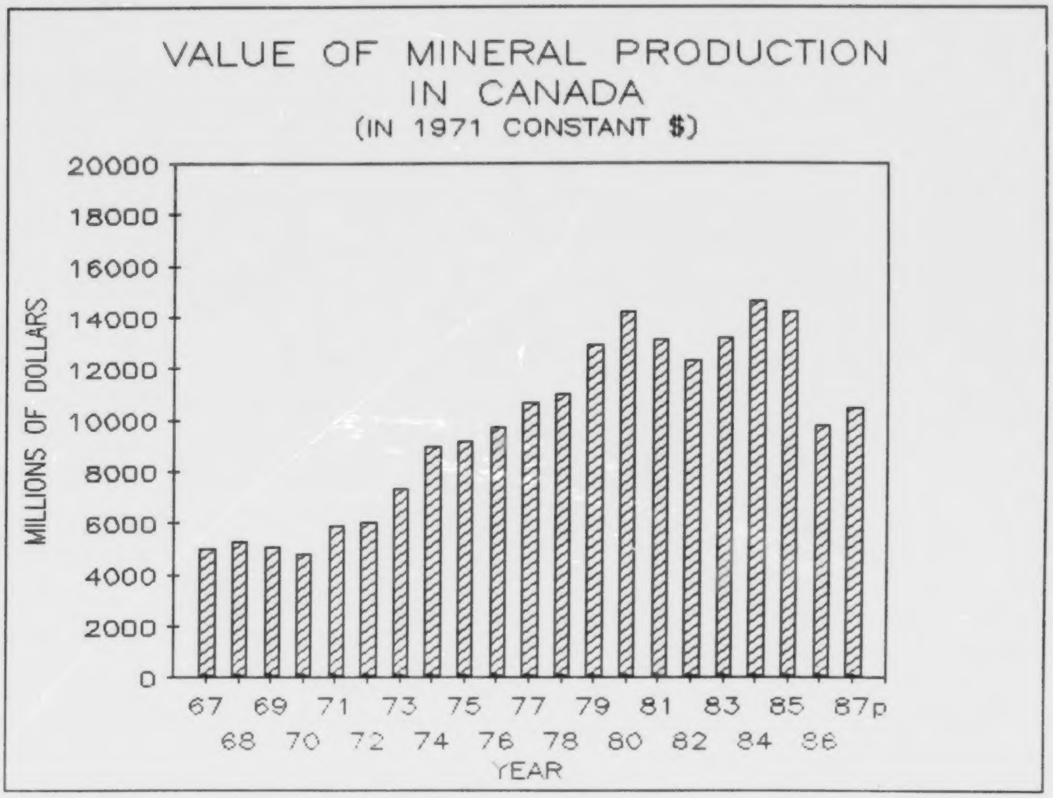
VOLUME AND VALUE OF MINERAL PRODUCTION IN ONTARIO AND CANADA

VALUE OF MINERAL PRODUCTION
IN CANADA AND ONTARIO

VALUE OF PRODUCTION IN 000'S

	CANADA			ONTARIO		
YEAR	CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS
1967	4 377 692	5 096 266	17 449 614	1 194 497	1 390 567	4 761 301
1968	4 720 162	5 321 490	18 220 781	1 355 580	1 528 275	5 232 814
1969	4 733 222	5 105 957	17 482 796	1 223 346	1 319 683	4 518 595
1970	4 731 180	4 887 582	16 735 081	1 635 066	1 689 118	5 783 540
1971	5 962 465	5 962 465	20 415 480	1 598 770	1 598 770	5 474 188
1972	6 407 793	6 108 478	20 915 428	1 598 837	1 524 154	5 218 702
1973	8 365 938	7 357 905	25 193 467	1 919 903	1 688 569	5 781 661
1974	11 711 004	9 050 235	30 988 006	2 526 950	1 952 821	6 686 459
1975	13 524 125	9 231 485	31 608 604	2 521 439	1 721 119	5 893 111
1976	15 689 677	9 781 594	33 492 178	2 709 039	1 688 927	5 782 886
1977	18 472 943	10 758 849	36 838 297	2 974 270	1 732 248	5 931 217
1978	20 205 144	11 059 192	37 866 673	2 682 787	1 468 411	5 027 840
1979	26 081 891	12 995 461	44 496 460	3 239 949	1 614 325	5 527 447
1980	31 841 758	14 298 050	48 956 524	4 551 766	2 043 900	6 998 315
1981	32 340 807	13 130 657	44 959 368	4 130 872	1 677 171	5 742 634
1982	33 837 022	12 340 271	42 253 087	3 100 053	1 130 581	3 871 109
1983	38 380 683	13 211 939	45 237 680	3 588 443	1 235 264	4 229 545
1984	43 692 646	14 506 190	49 669 197	4 420 325	1 467 571	5 024 964
1985	44 638 245	14 238 675	48 753 222	4 535 694	1 446 792	4 953 817
1986 (R)	32 451 921	9 857 813	33 753 152	4 829 353	1 466 997	5 022 997
1987 (P)	36 058 520	10 531 110	36 058 520	5 676 545	1 657 869	5 676 545
TOTAL		204 831 664	701 343 615		33 043 132	113 139 687

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION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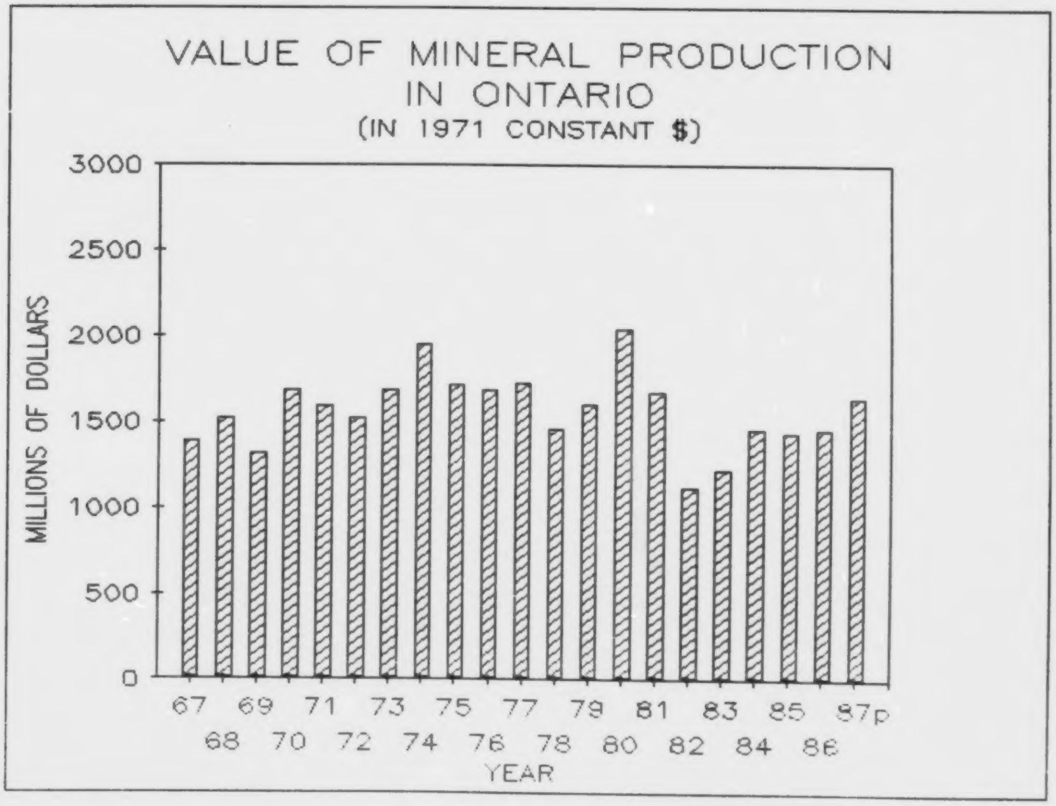
IN CANADA
(IN 1971 CONSTANT $)
MILLIONS OF DOLLARS
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87p
YEAR

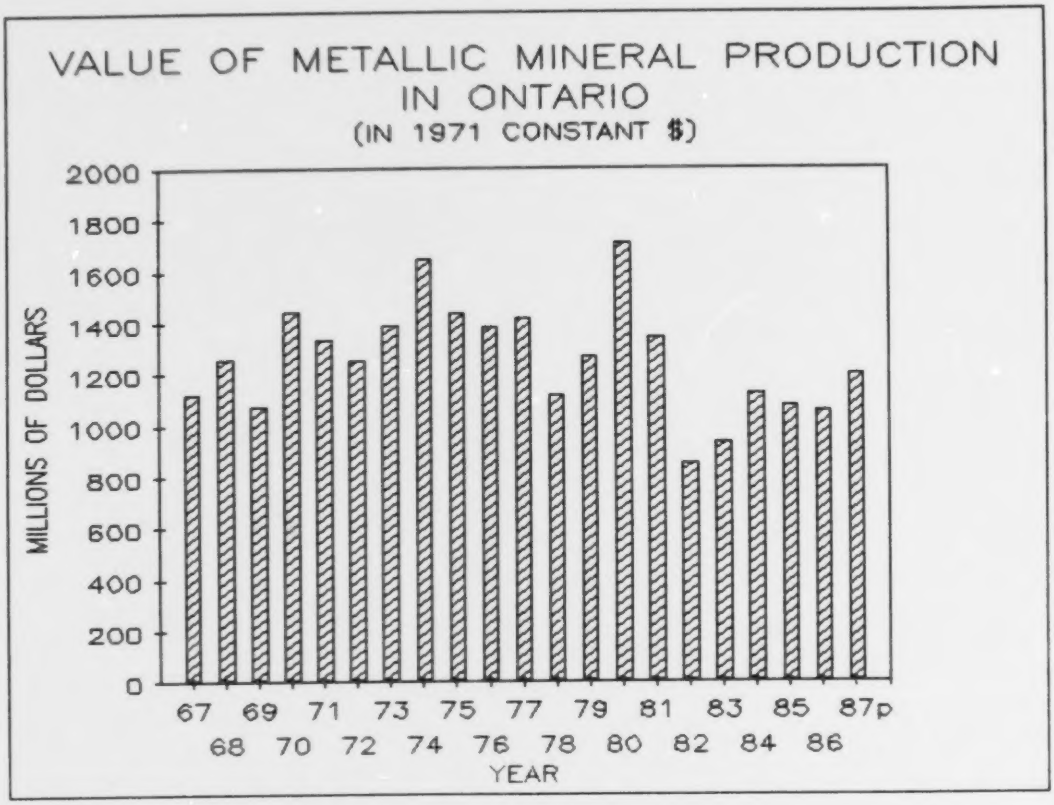

VALUE OF MINERAL PRODUCTION
IN ONTARIO
(IN 1971 CONSTANT $)
MILLIONS OF DOLLARS
3000
2500
2000
1500
1000
500
0
67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87p
YEAR

VALUE OF METALLIC AND NON-METALLIC MINERAL PRODUCTION IN ONTARIO

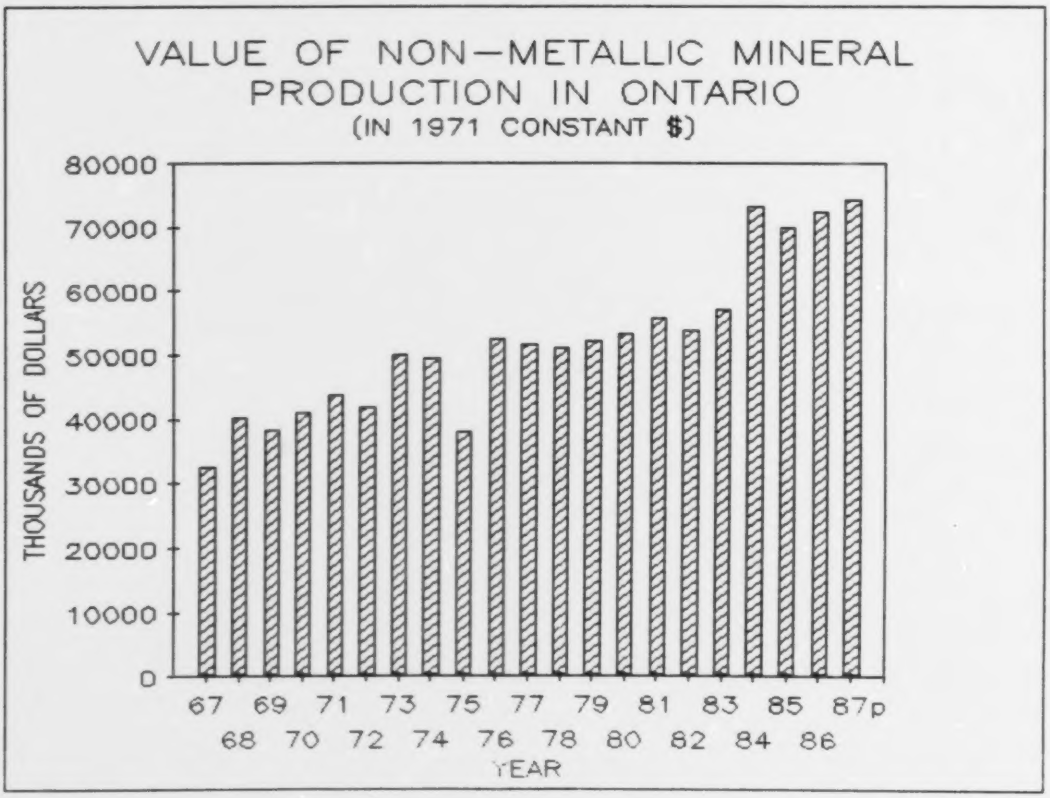
VALUE OF PRODUCTION IN 000'S

	METALLIC			NON-METALLIC		
YEAR	CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS
1967	970 906	1 130 275	3 870 062	28 303	32 949	112 816
1968	1 122 956	1 266 016	4 334 839	35 944	40 524	138 753
1969	1 001 021	1 079 850	3 697 407	35 638	38 444	131 632
1970	1 399 337	1 445 596	4 949 722	40 046	41 370	141 651
1971	1 335 245	1 335 245	4 571 879	43 876	43 876	150 232
1972	1 315 627	1 254 173	4 294 288	44 134	42 073	144 057
1973	1 587 040	1 395 813	4 779 265	57 205	50 312	172 268
1974	2 140 973	1 654 539	5 665 141	64 184	49 601	169 835
1975	2 113 116	1 442 400	4 938 777	56 186	38 352	131 318
1976	2 223 006	1 385 914	4 745 370	84 507	52 685	180 394
1977	2 435 987	1 418 746	4 857 786	89 178	51 938	177 836
1978	2 049 316	1 121 684	3 840 645	93 721	51 298	175 644
1979	2 544 644	1 267 884	4 341 235	105 361	52 497	179 749
1980	3 809 165	1 710 447	5 856 570	119 202	53 526	183 272
1981	3 319 635	1 347 801	4 614 872	137 905	55 991	191 713
1982	2 349 337	856 797	2 933 672	148 266	54 072	185 144
1983	2 720 794	936 590	3 206 884	166 860	57 439	196 671
1984	3 392 098	1 126 195	3 856 091	220 788	73 303	250 988
1985	3 385 984	1 080 059	3 698 121	220 139	70 220	240 432
1986 (R)	3 479 849	1 057 062	3 619 381	238 881	72 564	248 459
1987 (P)	4 109 568	1 200 224	4 109 568	255 354	74 578	255 354
TOTAL		26 513 310	90 781 575		1 097 612	3 758 218

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION



VALUE OF METALLIC MINERAL PRODUCTION IN ONTARIO
(IN 1971 CONSTANT $)

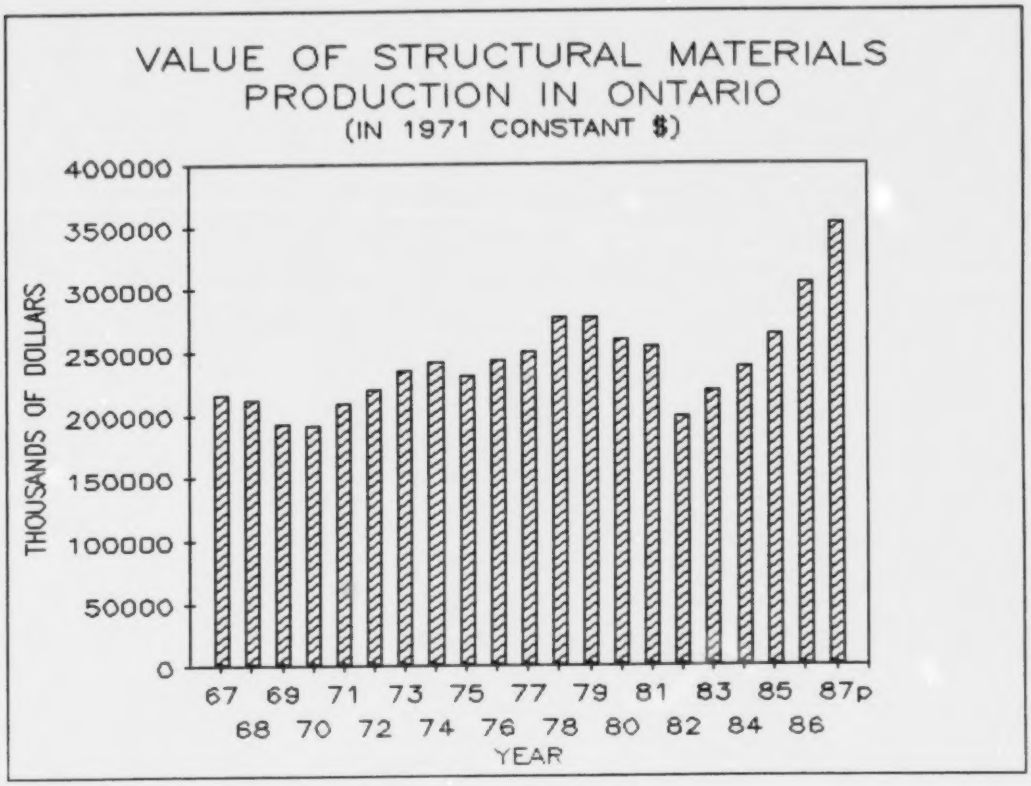


VALUE OF NON-METALLIC MINERAL PRODUCTION IN ONTARIO
(IN 1971 CONSTANT $)

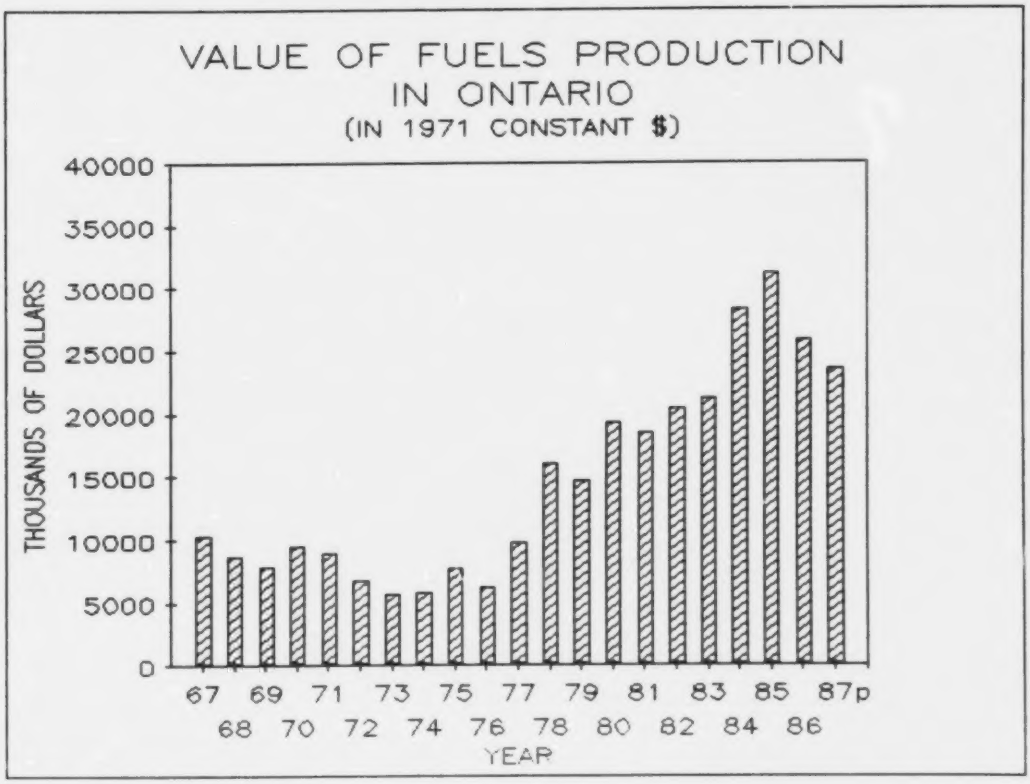
VALUE OF STRUCTURAL MATERIALS AND FUELS PRODUCTION IN ONTARIO

	STRUCTURAL MATERIALS			FUELS		
	VALUE OF PRODUCTION IN 000'S					
YEAR	CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS
1967	186 337	216 923	742 744	8 951	10 420	35 679
1968	188 914	212 981	729 245	7 766	8 755	29 977
1969	179 295	193 415	662 252	7 392	7 974	27 304
1970	186 355	192 515	659 173	9 328	9 636	32 994
1971	210 589	210 589	721 056	9 060	9 060	31 021
1972	231 809	220 981	756 639	7 266	6 927	23 718
1973	269 115	236 689	810 423	6 544	5 755	19 706
1974	314 203	242 815	831 399	7 590	5 866	20 084
1975	340 583	232 480	796 011	11 554	7 887	27 004
1976	391 450	244 046	835 613	10 076	6 282	21 509
1977	432 211	251 725	861 905	16 894	9 839	33 690
1978	510 207	279 260	956 185	29 543	16 170	55 366
1979	560 266	279 156	955 830	29 679	14 788	50 633
1980	580 131	260 499	891 948	43 269	19 429	66 525
1981	627 664	254 837	872 562	45 668	18 542	63 487
1982	546 328	199 244	682 212	56 122	20 467	70 080
1983	638 748	219 879	752 865	62 041	21 357	73 125
1984	721 696	239 607	820 415	85 742	28 467	97 471
1985	831 691	265 292	908 360	97 880	31 222	106 904
1986 (R)	1 025 012	311 364	1 066 112	85 612	26 006	89 045
1987 (P)	1 230 640	359 416	1 230 640	80 983	23 652	80 983
TOTAL		5 123 713	17 543 589		308 501	1 056 305

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION



VALUE OF STRUCTURAL MATERIALS PRODUCTION IN ONTARIO
(IN 1971 CONSTANT $)



VALUE OF FUELS PRODUCTION IN ONTARIO
(IN 1971 CONSTANT $)

VOLUME AND VALUE OF PRODUCTION OF CADMIUM IN ONTARIO

YEAR	VOLUME OF PRODUCTION IN 000'S POUNDS	KG	VALUE OF PRODUCTION IN 000'S CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	UNIT VALUE 1987 DOLLARS/KG
1967	2 024	918	5 667	6 597	22 590	24.61
1968	2 733	1 240	7 788	8 780	30 064	24.25
1969	3 076	1 395	10 826	11 678	39 986	28.66
1970	2 351	1 067	8 371	8 647	29 608	27.76
1971	2 414	1 095	4 683	4 683	16 035	14.64
1972	2 575	1 168	6 515	6 211	21 267	18.21
1973	2 765	1 254	10 063	8 851	30 306	24.17
1974	1 680	762	6 681	5 163	17 679	23.20
1975	1 468	666	5 011	3 421	11 713	17.59
1976	1 618	734	4 247	2 648	9 066	12.35
1977	1 329	603	4 188	2 439	8 351	13.85
1978	1 142	518	3 192	1 747	5 981	11.55
1979	1 483	673	4 796	2 389	8 182	12.16
1980	1 718	779	5 283	2 372	8 123	10.43
1981	1 343	609	2 959	1 202	4 114	6.75
1982	1 210	549	1 823	665	2 276	4.15
1983	1 474	668	1 638	564	1 930	2.89
1984	1 839	834	3 116	1 035	3 542	4.25
1985	1 870	848	2 586	825	2 824	3.33
1986 (R)	1 675	760	2 904	882	3 021	3.98
1987 (P)	3 333	1 512	8 602	2 512	8 602	5.69
TOTAL	41 120	18 652		83 311	285 260	

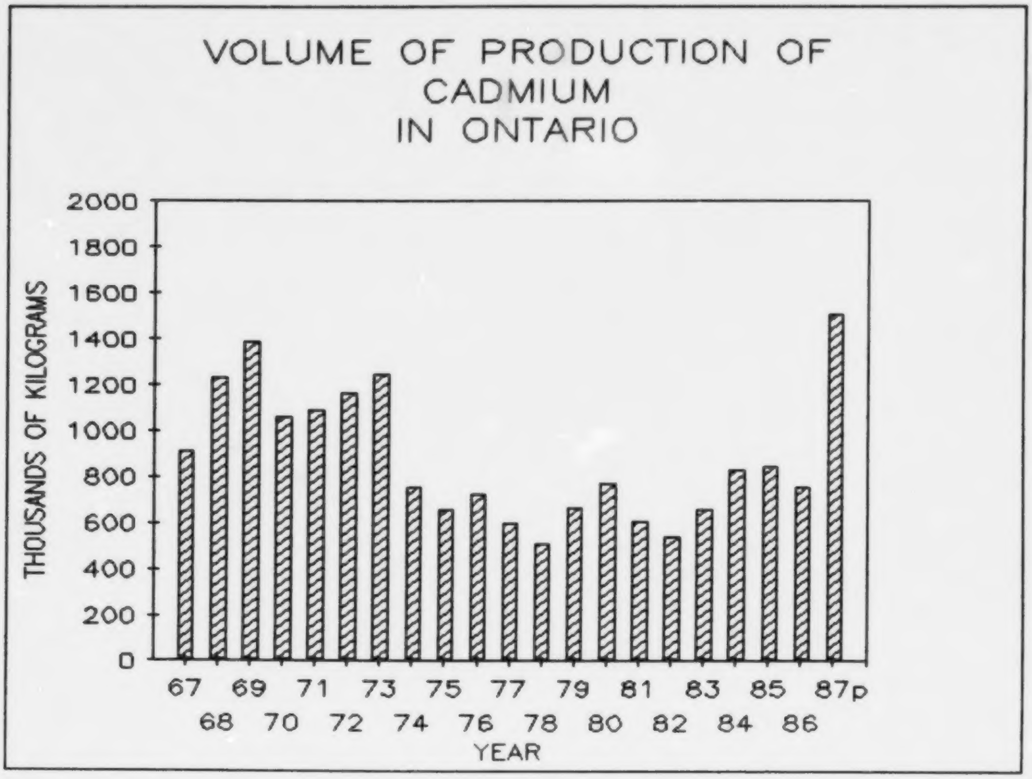
Cadmium is used in batteries, pigments and plastics and in coating and plating.

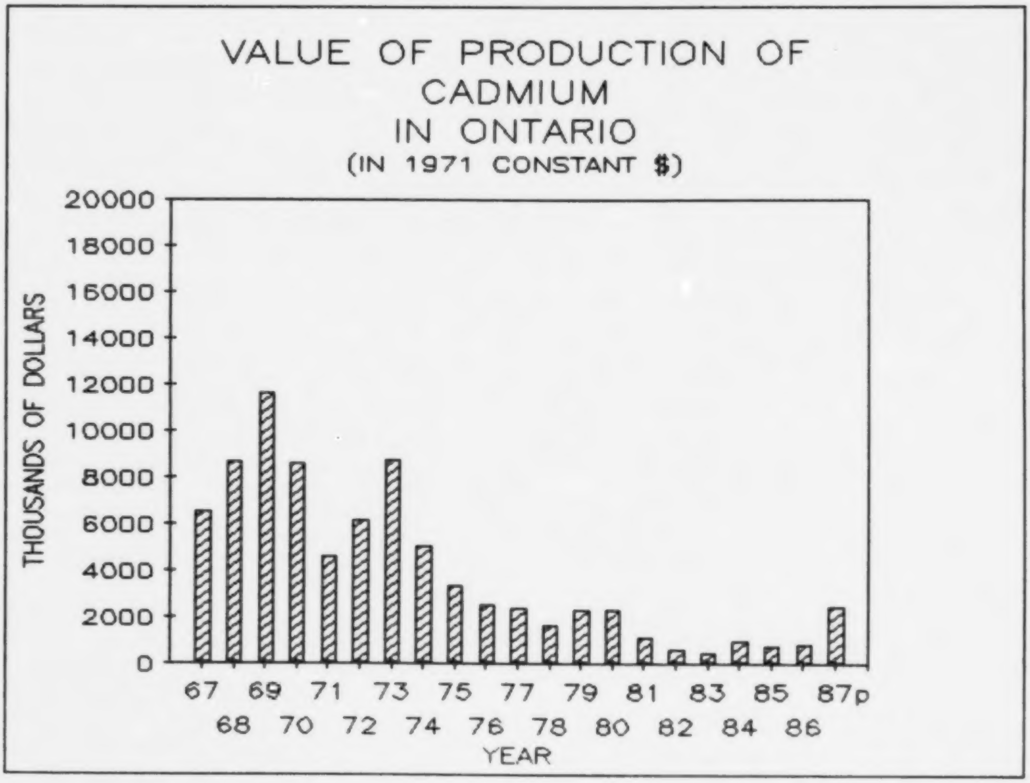
This metal is principally recovered as a by-product of zinc refining. In 1986, Ontario produced 53% of Canada's total cadmium production. Output has increased steadily since 1982 reflecting the increases in zinc production over that time. Cadmium production in 1987 represents an estimate. The large increase includes the refining of zinc concentrate in Ontario, Quebec and other export markets.

In the long term, cadmium supply depends on zinc production. After several years of world oversupply, cadmium consumption has exceeded supply in 1986 and 1987. Greater usage in nickel-cadmium batteries and in solar photovoltaic cells will likely increase future consumption.

In the chart above, cadmium production represents the refining of zinc by Cominco Ltd., Trail, British Columbia; Hudson Bay Mining and Smelting Co. Ltd., Flin Flon, Manitoba; Kidd Creek Mines Ltd., Timmins, Ontario; and Canadian Electrolytic Zinc Ltd., Valleyfield, Quebec.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION


VOLUME OF PRODUCTION OF CADMIUM IN ONTARIO


VALUE OF PRODUCTION OF CADMIUM IN ONTARIO (IN 1971 CONSTANT $)

VOLUME AND VALUE OF PRODUCTION OF CALCIUM IN ONTARIO

	VOLUME OF PRODUCTION IN 000'S		VALUE OF PRODUCTION IN 000'S			UNIT VALUE
YEAR	POUNDS	KG	CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	1987 DOLLARS/KG
1967	544	247	536	623	2 135	8.66
1968	469	213	451	508	1 741	8.19
1969	943	428	954	1 029	3 522	8.24
1970	444	201	374	387	1 325	6.58
1971	355	161	292	292	998	6.19
1972	469	213	338	322	1 102	5.18
1973	652	296	490	431	1 475	4.99
1974	1 050	476	915	707	2 422	5.09
1975	944	428	1 005	686	2 348	5.48
1976	1 133	514	1 433	893	3 058	5.95
1977	1 082	491	1 802	1 049	3 593	7.32
1978	1 267	575	2 397	1 312	4 493	7.82
1979	1 005	456	2 152	1 072	3 672	8.06
1980	1 170	531	3 422	1 536	5 261	9.91
1981	1 035	469	3 512	1 426	4 882	10.40
1982	726	329	2 567	936	3 206	9.74
1983	880	399	3 306	1 138	3 897	9.77
1984	1 136	515	4 560	1 514	5 183	10.06
1985	1 628	739	7 789	2 485	8 507	11.52
1986 (R)	687	312	3 743	1 137	3 894	12.49
TOTAL	17 619	7 993		19 483	66 714	

Calcium, the fifth most abundant element and third most abundant metal in the earth's crust, is found in limestone, gypsum, fluoride, apatite and in sea water. Calcium occurs in nature in combination with other elements. Two calcium products are calcium metal and calcium chloride.

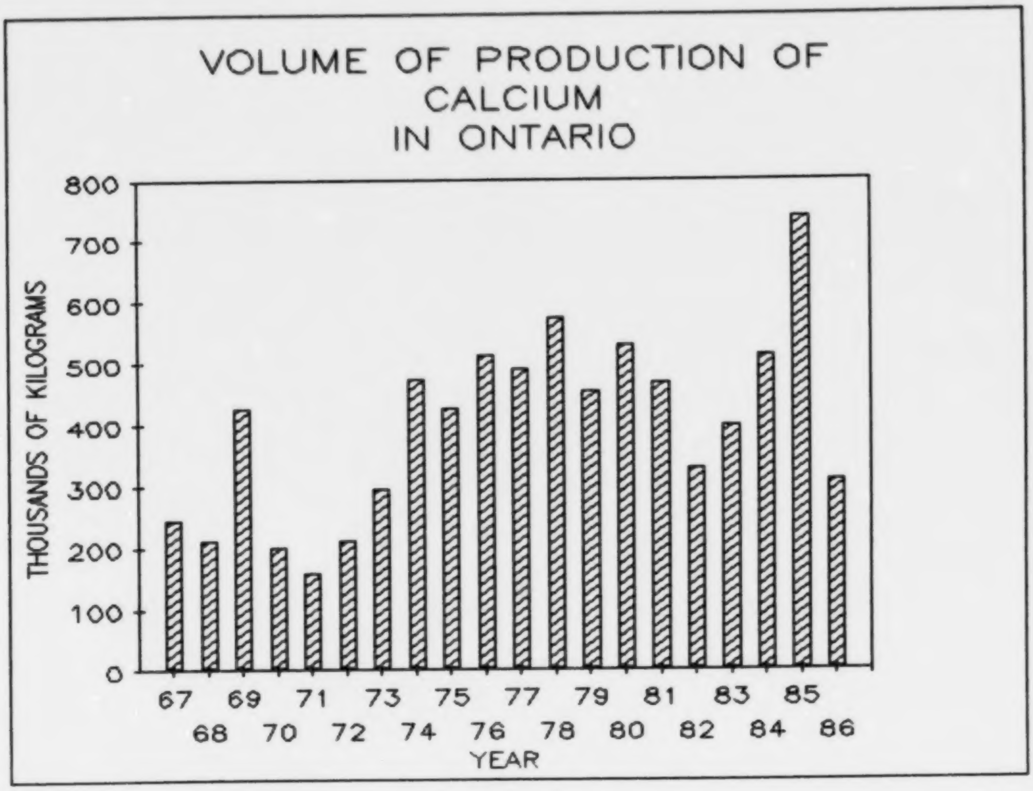
The primary use of calcium metal is as a desulphurizer and deoxidizer in the iron and steel industry. It is also used as a reducing agent to recover refractory metals (ie: chromium, thorium and other rare earth metals), in the preparation of vitamin B and as a cathode coating.

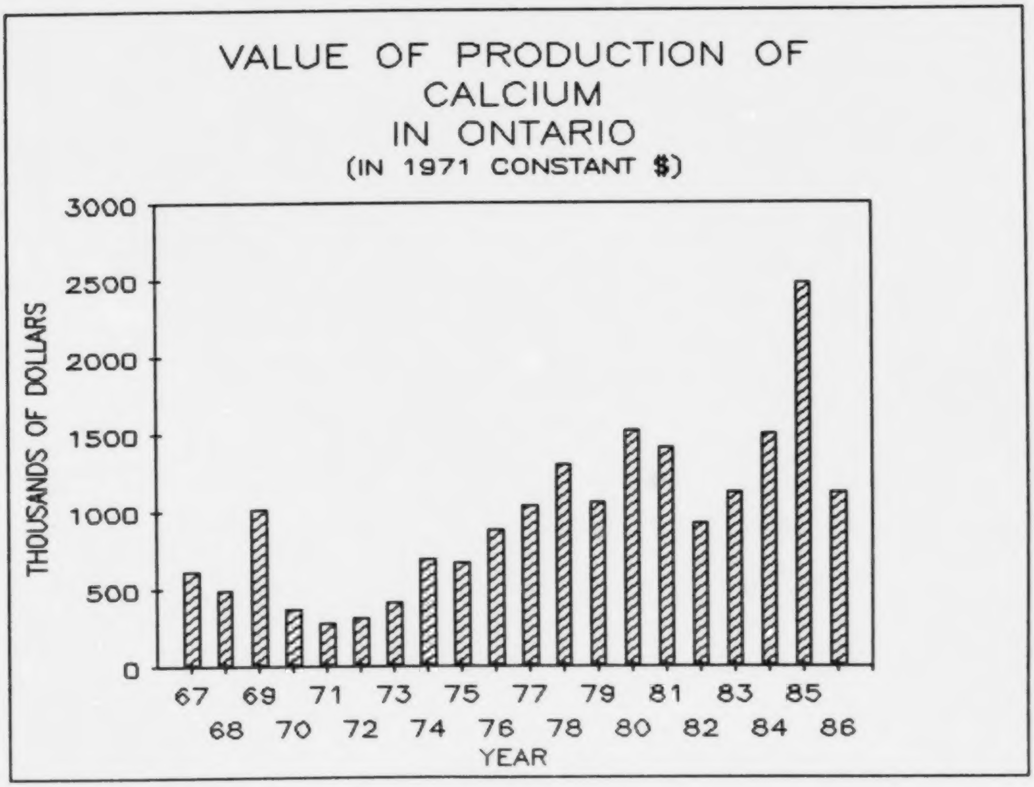
Calcium chloride is used primarily for road and pavement de-icing, road base stabilization, dust control, oil and gas drilling and tire ballasting.

In Ontario, calcium metal is produced near Haley Station. Due to the sustained growth of the major Western economies, the demand for calcium metal is strong and increasing, particularly in the iron and steel industry. Consequently, production is estimated to increase by 2% per annum for the next decade.

In the above chart, output figures represent calcium metal, plus calcium content of alloys.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION


VOLUME OF PRODUCTION OF CALCIUM IN ONTARIO


VALUE OF PRODUCTION OF CALCIUM IN ONTARIO (IN 1971 CONSTANT $)

VOLUME AND VALUE OF PRODUCTION OF CEMENT IN ONTARIO

	VOLUME OF PRODUCTION IN 000'S		VALUE OF PRODUCTION IN 000'S			UNIT VALUE
YEAR	SHORT TONS	TONNE	CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	1987 DOLLARS/TONNE
1967	2 894	2 626	47 597	55 410	189 725	72.25
1968	3 104	2 816	53 684	60 523	207 231	73.60
1969	3 113	2 824	56 650	61 111	209 244	74.10
1970	3 143	2 851	58 482	60 415	206 860	72.56
1971	3 570	3 239	68 300	68 300	233 860	72.20
1972	3 761	3 412	76 213	72 653	248 765	72.91
1973	4 319	3 918	86 610	76 174	260 820	66.56
1974	4 592	4 166	102 390	79 127	270 931	65.03
1975	4 119	3 737	110 922	75 715	259 248	69.38
1976	4 101	3 720	126 124	78 631	269 232	72.37
1977	4 020	3 647	138 795	80 836	276 782	75.89
1978	4 355	3 951	160 206	87 688	300 244	75.99
1979	4 538	4 117	182 252	90 808	310 928	75.52
1980	4 483	4 067	190 793	85 673	293 343	72.12
1981	4 175	3 787	205 063	83 257	285 073	75.27
1982	3 315	3 007	185 047	67 486	231 073	76.83
1983	3 528	3 201	212 263	73 068	250 186	78.16
1984	3 949	3 583	225 320	74 808	256 141	71.50
1985	4 457	4 044	265 048	84 545	289 482	71.59
1986 (R)	5 338	4 843	329 021	99 945	342 213	70.66
1987 (P)	5 733	5 201	413 671	120 815	413 671	79.54
TOTAL	84 607	76 757		1 636 988	5 605 052	

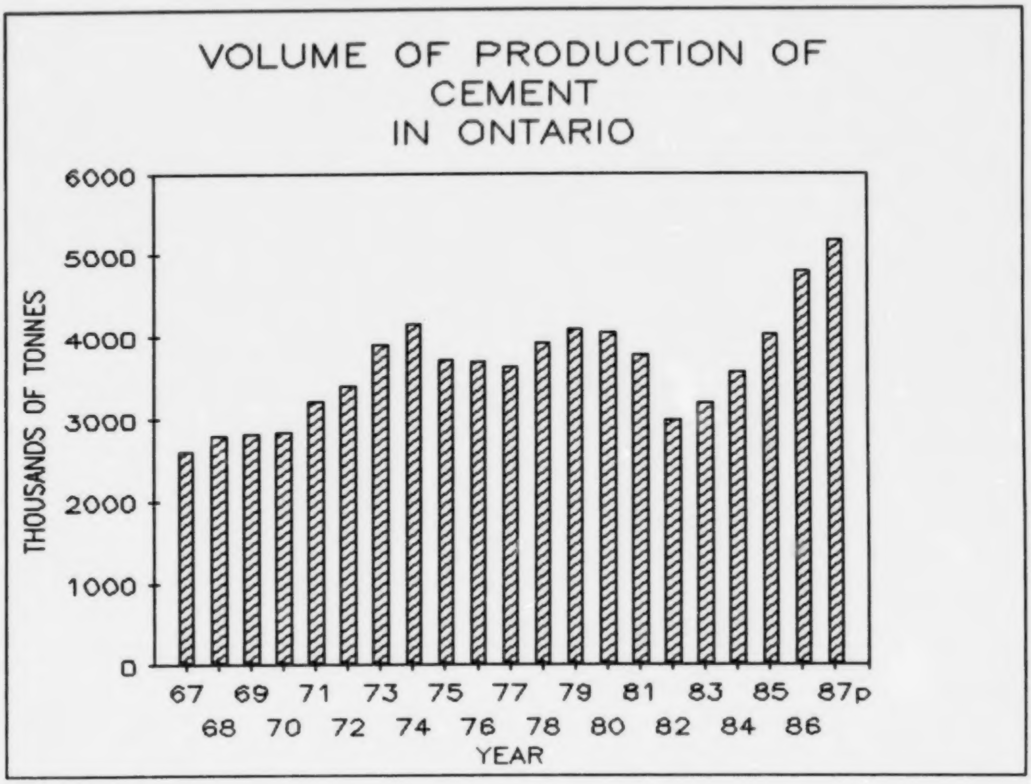
The Canadian cement industry is strongly regionalized and is located close to its major markets. The primary use of cement is in the manufacture of concrete.

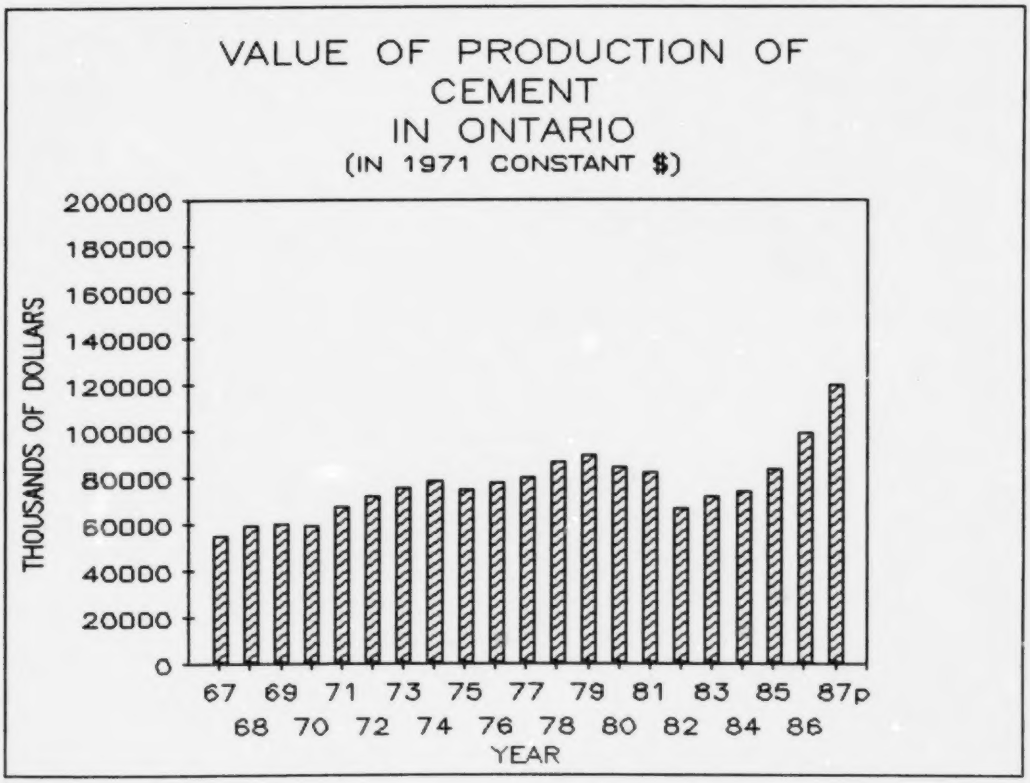
In Ontario, cement plants are located in Woodstock, Picton, Clarkson, Kingston, Bowmanville and St. Mary's. They account for over 40% of Canada's total production.

Concrete is a widely used building material, and is dependant on the growth of the building and road construction sectors. In 1986 non-residential building construction increased by 9% over 1985, with the trend carrying on into 1987. In the period, from 1985 to 1986, the production of cement increased by 19%. Projections for 1987 are for an 8% growth over the preceeding year.

In the above chart, production represents quantities shipped. Value is as reported by the producer.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION


VOLUME OF PRODUCTION OF CEMENT IN ONTARIO
THOUSANDS OF TONNES
6000
5000
4000
3000
2000
1000
0
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87p
YEAR


VALUE OF PRODUCTION OF CEMENT IN ONTARIO
(IN 1971 CONSTANT $)
THOUSANDS OF DOLLARS
200000
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87p
YEAR

VALUE OF PRODUCTION OF CLAY PRODUCTS IN ONTARIO

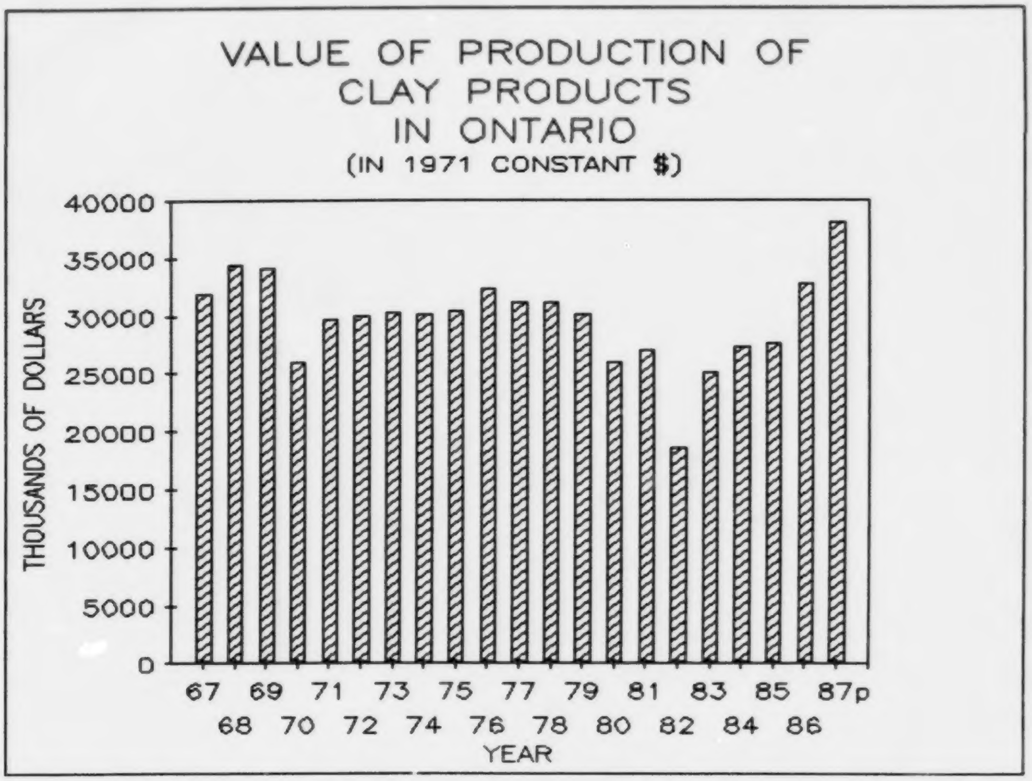
	VALUE OF PRODUCTION IN 000'S		
YEAR	CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS
1967	27 451	31 957	109 420
1968	30 629	34 531	118 236
1969	31 673	34 167	116 988
1970	25 197	26 030	89 127
1971	29 815	29 815	102 088
1972	31 570	30 095	103 046
1973	34 601	30 432	104 199
1974	39 074	30 196	103 391
1975	44 769	30 559	104 634
1976	52 117	32 492	111 252
1977	53 784	31 325	107 255
1978	57 142	31 277	107 091
1979	60 767	30 278	103 671
1980	58 110	26 093	89 344
1981	66 660	27 065	92 669
1982	51 131	18 647	63 849
1983	73 297	25 231	86 393
1984	82 671	27 447	93 980
1985	86 654	27 641	94 642
1986 (R)	108 067	32 827	112 400
1987 (P)	130 866	38 220	130 866
TOTAL		626 325	2 144 541

Clays are a complex group of minerals, each characterized by a different mineralogy, occurrence and use. The commercial value of clays is dependent on their plasticity, colour, shrinkage and strength. Clays and clay products are a high-bulk, low-unit value material which are sensitive to transportation costs. Production is directly influenced by changes in the general economic climate and the building construction industry.

In Ontario, brick manufacturing accounts for 84% of the total value of output from clay products, drainage tile 1.9% and flue lining 4.5%. Clay is also used in the manufacturing of ceramics, grey portland cement and refractories. Ontario accounts for over 60% of Canada's total clay production. The clay products industry in Ontario has steadily increased in production value since 1982. From 1985 to 1986 value increased by 24% and projections for 1987 are for a 20 % increase over 1986 figures. The fortunes of the clay products industry will be affected by the building construction industry in Ontario.

In the above chart, production represents shipments of brick and other clay products made from domestic clays.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION



VALUE OF PRODUCTION OF CLAY PRODUCTS IN ONTARIO

(IN 1971 CONSTANT $)

VOLUME AND VALUE OF PRODUCTION OF COBALT IN ONTARIO

	VOLUME OF PRODUCTION IN 000'S		VALUE OF PRODUCTION IN 000'S			UNIT VALUE
YEAR	POUNDS	KG	CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	1987 DOLLARS/KG
1967	2 929	1 329	5 967	6 947	23 785	17.90
1968	3 221	1 461	6 958	7 844	26 859	18.38
1969	2 554	1 158	5 421	5 848	20 023	17.29
1970	3 693	1 675	8 211	8 483	29 045	17.34
1971	3 511	1 593	7 650	7 650	26 195	16.45
1972	2 594	1 177	6 388	6 089	20 849	17.72
1973	2 528	1 147	6 914	6 081	20 821	18.16
1974	2 775	1 259	8 142	6 292	21 544	17.11
1975	2 400	1 089	10 278	7 016	24 021	22.07
1976	2 533	1 149	10 942	6 822	23 358	20.33
1977	2 785	1 263	16 053	9 349	32 012	25.34
1978	2 000	907	24 026	13 151	45 028	49.64
1979	2 817	1 278	86 300	42 999	147 230	115.21
1980	3 717	1 686	106 901	48 002	164 359	97.49
1981	4 037	1 831	94 392	38 324	131 222	71.65
1982	2 130	966	28 258	10 306	35 287	36.52
1983	2 259	1 025	16 602	5 715	19 568	19.10
1984	3 559	1 614	37 027	12 293	42 092	26.07
1985	3 817	1 731	60 434	19 277	66 005	38.13
1986 (R)	4 435	2 012	40 323	12 249	41 940	20.85
1987 (P)	5 476	2 484	47 034	13 737	47 034	18.93
TOTAL	65 770	29 834		294 474	1 008 277	

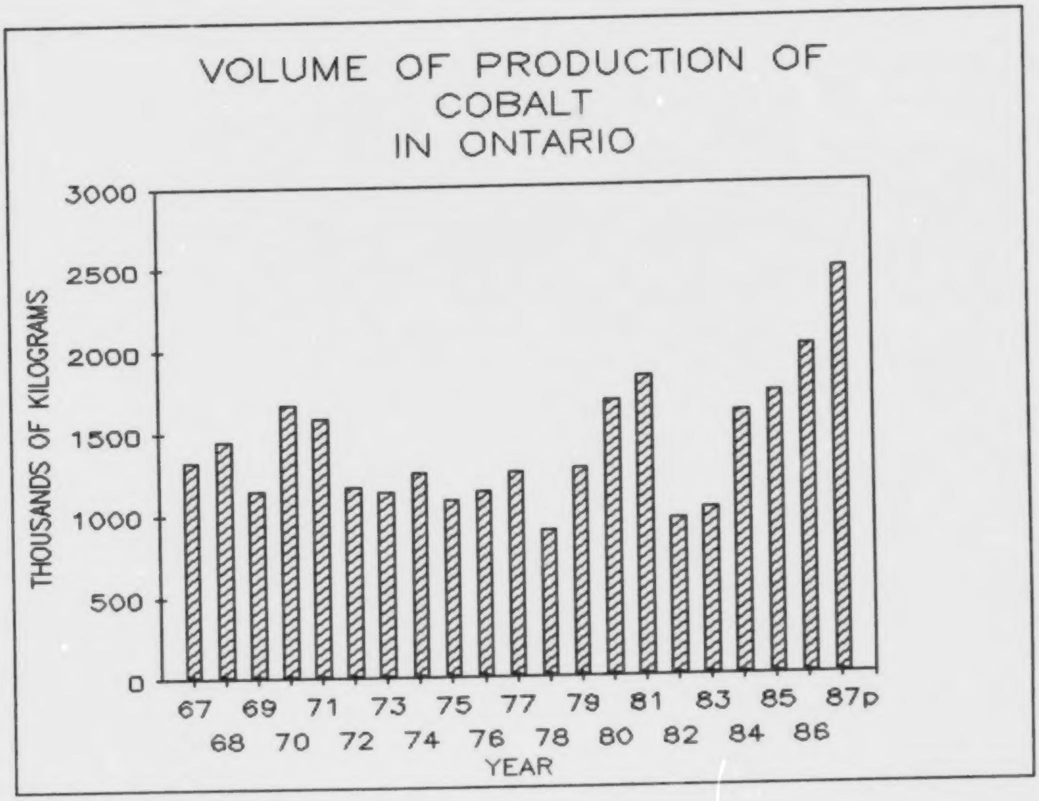
Cobalt is recovered as a by-product from nickel-copper production in Sudbury, Ontario. Cobalt is used principally in the manufacturing of superalloys, magnetic materials, catalysts and as oxide in paint, glass and ceramics.

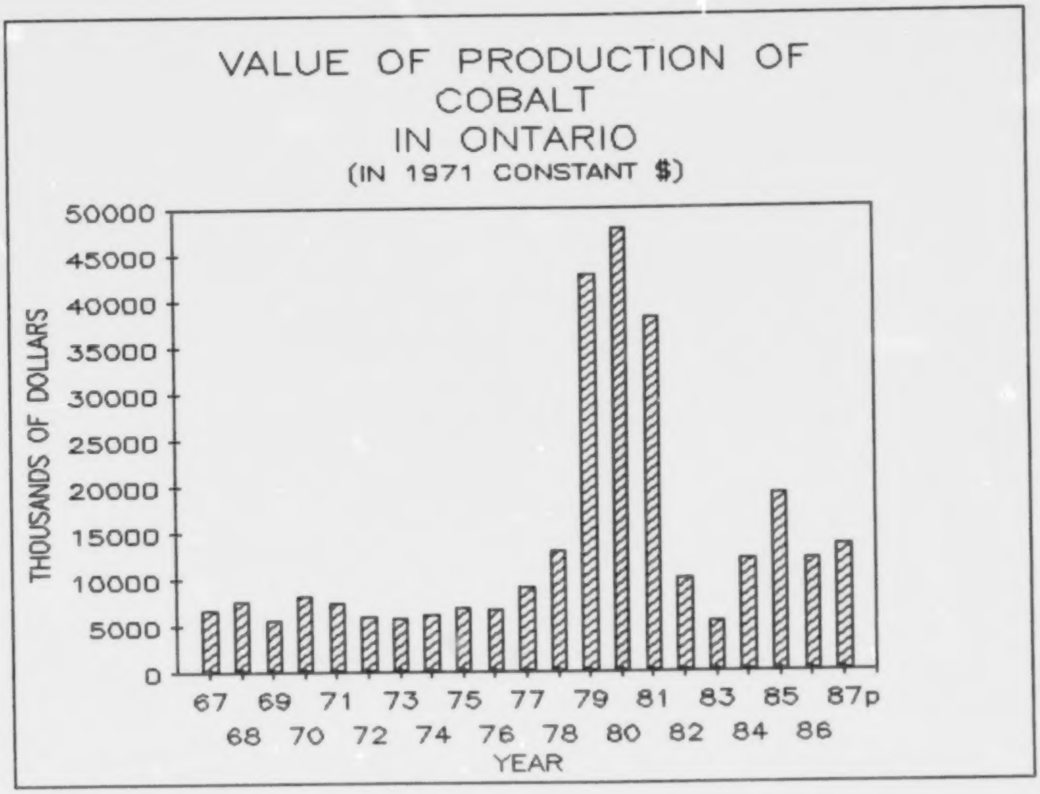
Canada ranks fourth in world output after Zaire, Zambia, and the U.S.S.R.. In 1986, Ontario produced over 85% of Canada's total cobalt. In Ontario, production has increased at an average rate of 22% per annum since 1982. This is partly due to improvements in processing that resulted in increased recovery rates.

Current world cobalt production capacity is in excess of current demand. In the long term, world cobalt consumption is expected to increase at an annual rate of 1 to 2%. Any increase in cobalt supply will depend on the growth in nickel and copper production. A substantial price increase in cobalt may result in the substituting of cobalt by other metals in the production of superalloys.

In the chart above, production includes:
(a) Cobalt metal produced at Canadian refineries, plus the cobalt content of salts and oxides made at these refineries. Recoveries from imported concentrates are excluded. The value is the total sales value of these products as reported by the refineries.
(b) Cobalt content of ores and concentrates exported and valued at the average yearly industry price x volume.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION


VOLUME OF PRODUCTION OF COBALT IN ONTARIO


VALUE OF PRODUCTION OF COBALT IN ONTARIO (IN 1971 CONSTANT $)

VOLUME AND VALUE OF PRODUCTION OF COPPER IN ONTARIO

	VOLUME OF PRODUCTION IN 000'S		VALUE OF PRODUCTION IN 000'S			UNIT VALUE
YEAR	POUNDS	KG	CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	1987 DOLLARS/KG
1967	552 292	250 515	261 815	304 790	1 043 602	4.17
1968	581 236	263 644	278 313	313 769	1 074 345	4.07
1969	477 620	216 645	244 301	263 539	902 357	4.17
1970	590 185	267 703	340 840	352 107	1 205 615	4.50
1971	604 740	274 305	317 528	317 528	1 087 215	3.96
1972	579 445	262 832	293 494	279 784	957 982	3.64
1973	574 647	260 655	365 306	321 289	1 100 094	4.22
1974	625 886	283 897	483 995	374 030	1 280 680	4.51
1975	568 303	257 778	361 432	246 711	844 739	3.28
1976	573 638	260 198	391 377	244 001	835 459	3.21
1977	617 154	279 936	427 981	249 261	853 469	3.05
1978	434 397	197 039	324 000	177 340	607 211	3.08
1979	425 373	192 946	457 472	227 938	780 461	4.04
1980	540 186	245 024	631 188	283 425	970 447	3.96
1981	499 093	226 385	521 020	211 539	724 308	3.20
1982	347 997	157 849	298 008	108 683	372 130	2.36
1983	500 000	226 796	457 349	157 435	539 058	2.38
1984	644 683	292 423	537 391	178 417	610 899	2.09
1985	614 076	278 540	545 235	173 919	595 497	2.14
1986 (R)	582 932	264 413	534 006	162 213	555 419	2.10
1987 (P)	618 692	280 634	674 643	197 034	674 643	2.40
TOTAL	11 552 575	5 240 157		5 144 752	17 615 630	

Copper is used in pure form and in alloys. The metal is used in numerous applications because of its electrical and thermal conductivity, malleability and strength. Optical fibres, aluminum and plastics present major competition to copper's uses in the electrical, telecommunications and plumbing sectors.

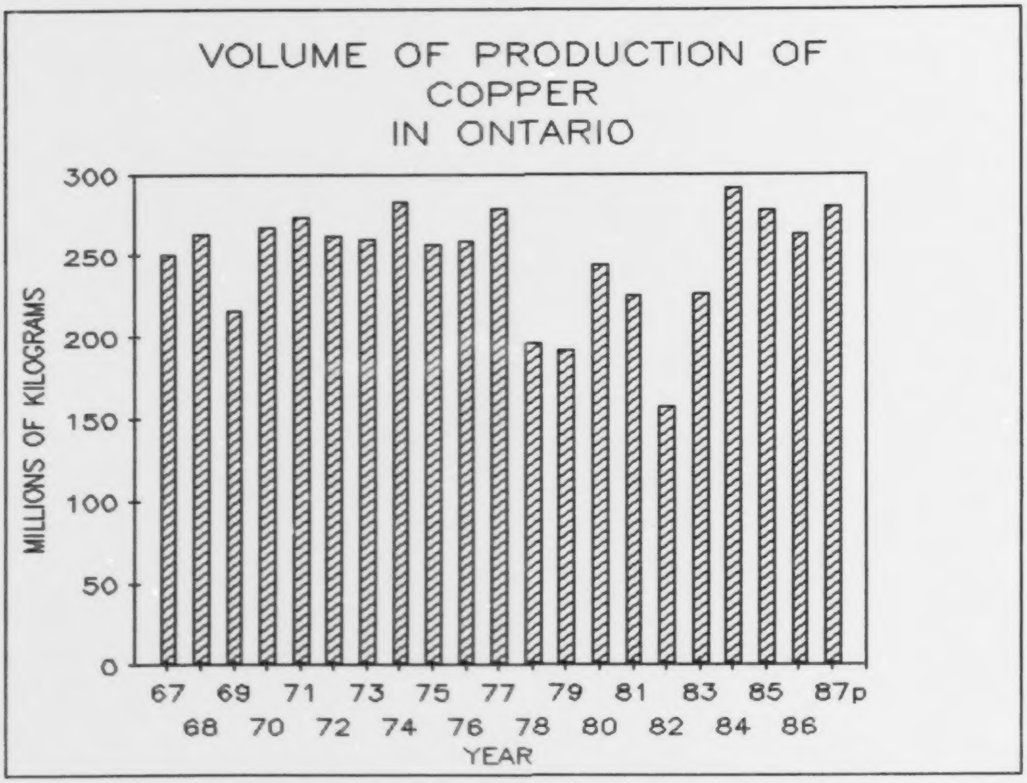
Ontario is the second largest producer of copper in Canada producing approximately 37% of the total national copper output. Production in Ontario has remained fairly constant since 1985. Canada ranks fourth in the world after Chile, the U.S. and the U.S.S.R..

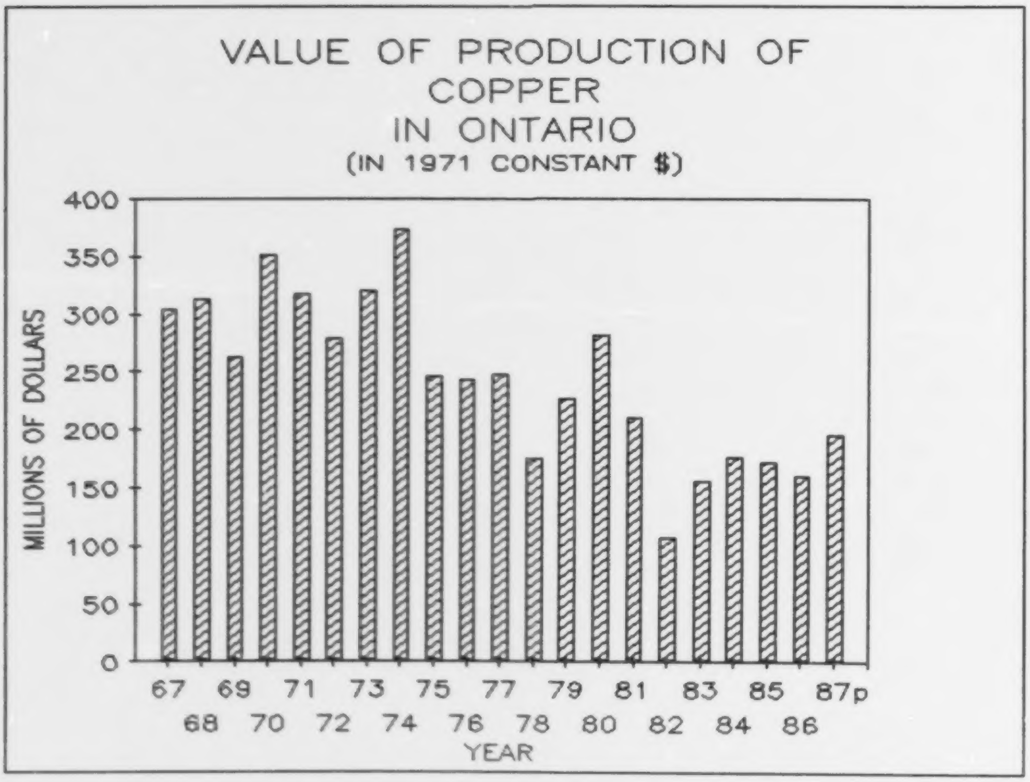
On the international scene, after shortfalls in copper supply since 1984, the Western World's supply-demand ratio is forecast for oversupply in 1988 and 1989. Increases in copper output are expected in 1987-88, especially from Chile, Mexico and Asia.

In the chart above, production includes:
(a) Recoverable copper (metal paid for) in ores and concentrate shipped for export.
(b) Copper content of blister copper made at Canadian smelters.
(c) Copper content of nickel-copper matte shipped for export by Canadian smelters. No allowance is made for losses in treatment of matte, as practically all of the copper is recovered.

Value is based on settlement value as reported or when settlement value is not available it is based on the average yearly industry price x volume.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION


VOLUME OF PRODUCTION OF COPPER IN ONTARIO


VALUE OF PRODUCTION OF COPPER IN ONTARIO (IN 1971 CONSTANT $)

VOLUME AND VALUE OF PRODUCTION OF GOLD IN ONTARIO

	VOLUME OF PRODUCTION IN 000'S		VALUE OF PRODUCTION IN 000'S			UNIT VALUE
YEAR	TROY OUNCES	G	CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	1987 DOLLARS/G
1967	1 495	46 512	56 451	65 717	225 015	4.84
1968	1 380	42 916	52 031	58 660	200 852	4.68
1969	1 230	38 247	46 346	49 996	171 186	4.48
1970	1 162	36 144	42 484	43 889	150 275	4.16
1971	1 134	35 271	40 080	40 080	137 233	3.89
1972	1 019	31 704	58 720	55 977	191 666	6.05
1973	922	28 687	89 843	79 018	270 557	9.43
1974	801	24 917	124 428	96 157	329 243	13.21
1975	755	23 488	123 679	84 422	289 062	12.31
1976	740	23 002	91 043	56 760	194 347	8.45
1977	739	22 989	116 108	67 623	231 540	10.07
1978	701	21 805	154 513	84 572	289 574	13.28
1979	616	19 173	221 474	110 351	377 840	19.71
1980	595	18 497	403 893	181 362	620 983	33.57
1981	589	18 308	333 797	135 525	464 036	25.35
1982	647	20 137	306 786	111 884	383 092	19.02
1983	748	23 260	389 338	134 023	458 896	19.73
1984	894	27 821	413 230	137 195	469 754	16.88
1985	1 016	31 600	441 493	140 827	482 192	15.26
1986 (R)	1 483	46 141	755 187	229 401	785 468	17.02
1987 (P)	1 738	54 070	1 029 159	300 572	1 029 159	19.03
TOTAL	20 404	634 689		2 264 011	7 751 970	

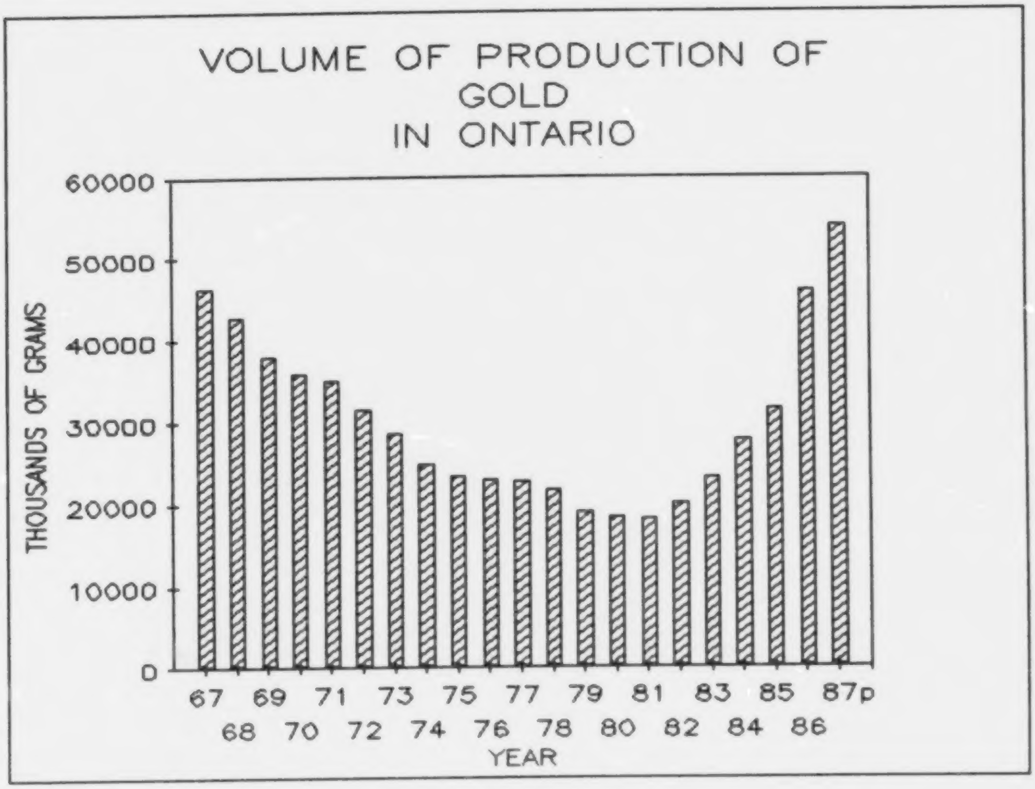
In 1987, there were 23 producing gold mines in Ontario. The Province produced 46 million grams or 45% of Canada's total gold production in 1986. The 46% increase in Ontario's gold production from 1985 to 1986 is attributed to in part to the start of three Hemlo gold mines in 1986. Gold exploration in Ontario accounted for over 45% of the total mineral exploration expenditures in 1986. Several new gold mines and the treatment of mine tailings in the Timmins and Kirkland Lake area will commence operations in 1988.

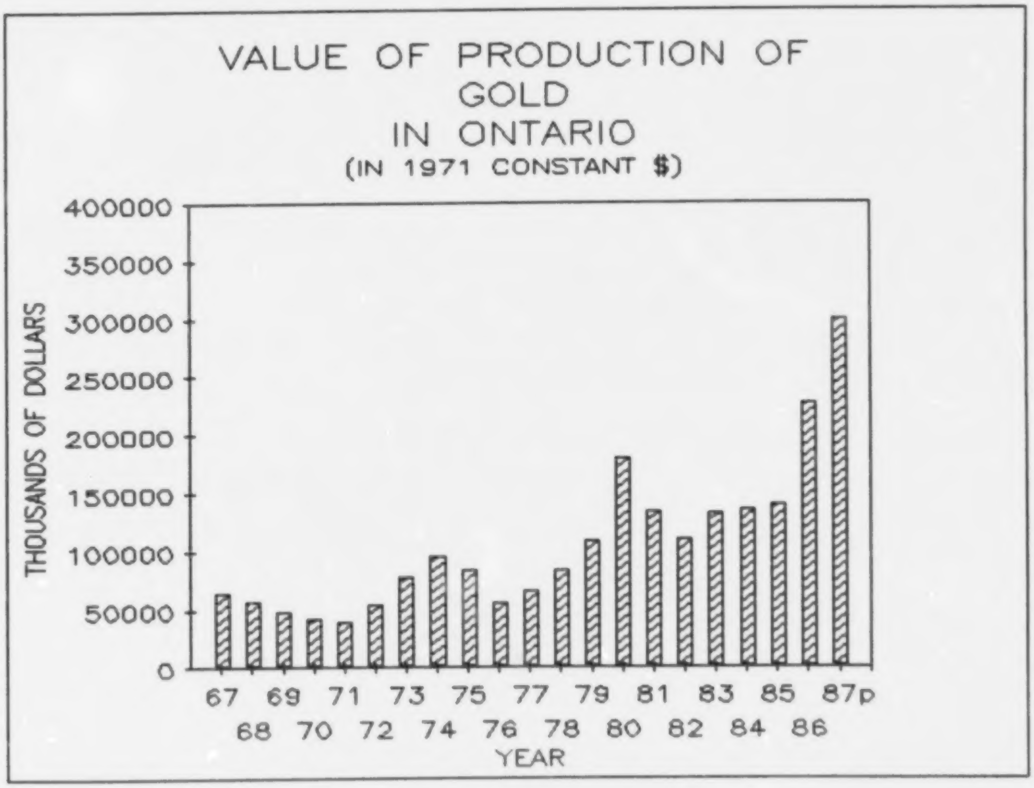
In 1986, world demand was mainly for jewellery and official coins. The estimated net world surplus of 300 tonnes was absorbed by private investors, especially in Japan and North America. World output increased 22% from 1985 to 1986 and is expected to increase until 1990.

In the chart above, production includes:
(a) Gold in crude bullion obtained direct from lode gold and other mines.
(b) Gold in blister copper made at copper smelters.
(c) Gold in base bullion made by lead smelters.
(d) Gold in all types of ores, concentrates, matte, etc. shipped for export.
(e) Gold in platinum-pallidium concentrates shipped for export.

Value is based on settlement value as reported or when settlement value is not available it is based on the average yearly industry price x volume.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION


VOLUME OF PRODUCTION OF GOLD IN ONTARIO


VALUE OF PRODUCTION OF GOLD IN ONTARIO (IN 1971 CONSTANT $)

VOLUME AND VALUE OF PRODUCTION OF GYPSUM IN ONTARIO

YEAR	VOLUME OF PRODUCTION IN 000'S		VALUE OF PRODUCTION IN 000'S			UNIT VALUE
	SHORT TONS	TONNE	CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	1987 DOLLARS/TONNE
1967	536	487	1 268	1 477	5 056	10.39
1968	571	518	1 461	1 647	5 640	10.89
1969	622	564	1 598	1 724	5 902	10.46
1970	537	487	1 195	1 235	4 228	8.68
1971	699	634	1 656	1 656	5 672	8.94
1972	726	659	2 158	2 057	7 045	10.69
1973	754	684	2 394	2 105	7 208	10.53
1974	774	703	2 784	2 151	7 365	10.48
1975	695	631	2 936	2 004	6 862	10.88
1976	633	574	2 680	1 671	5 721	9.97
1977	771	699	3 991	2 324	7 959	11.38
1978	833	756	4 525	2 477	8 480	11.22
1979	820	744	4 831	2 407	8 242	11.09
1980	816	740	5 729	2 572	8 808	11.90
1981	716	650	5 477	2 224	7 614	11.72
1982	633	574	5 516	2 012	6 888	11.99
1983	1 000	907	9 938	3 421	11 713	12.91
1984	1 304	1 183	12 716	4 222	14 455	12.22
1985	2 457	1 114	15 056	4 802	16 443	14.75
1986 (R)	1 457	1 321	16 974	5 156	17 655	13.36
1987 (P)	1 586	1 439	18 736	5 472	18 736	13.02
TOTAL	18 940	16 068		54 816	187 692	

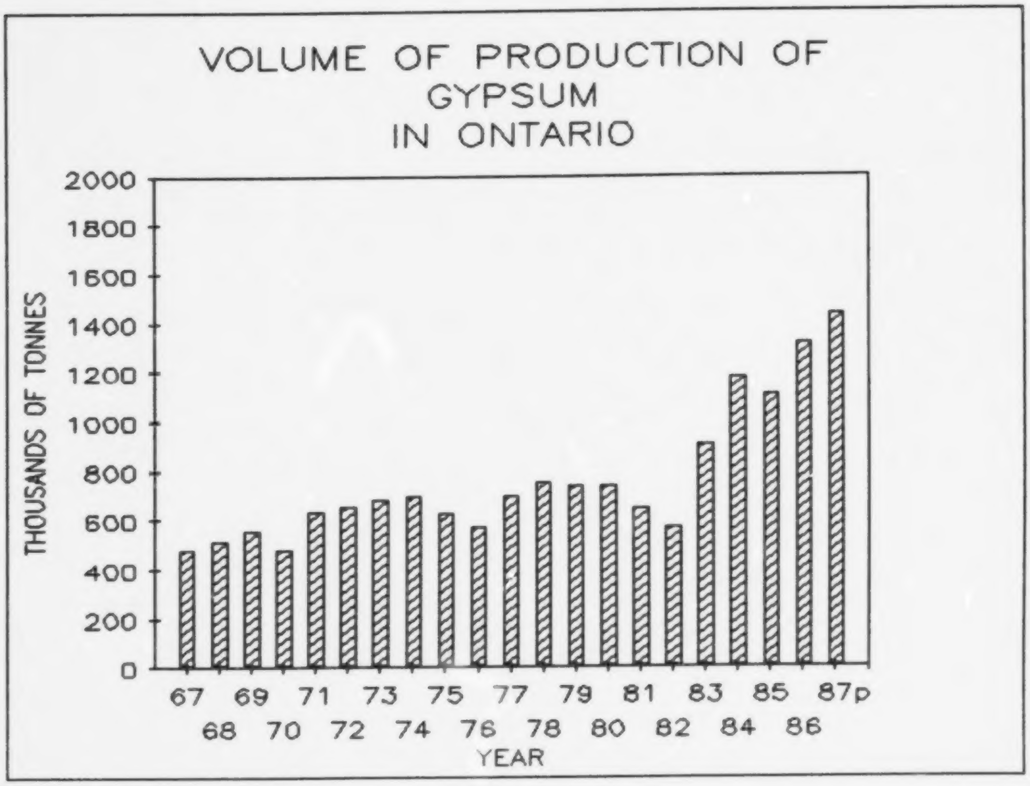
Gypsum is a hydrous calcium sulphate which occurs in abundance throughout the world. Canada is the world's second largest producer of crude gypsum.

With mines in Hagarsville, Caledonia and Drumbo, Ontario accounts for approximately 15% of Canada's gypsum output. Gypsum is used primarily in the manufacture of wallboard, plaster of paris and stucco. As well, it is used as a filler in paint and paper, as a soil conditioner and in the cement industry as a set inhibitor.

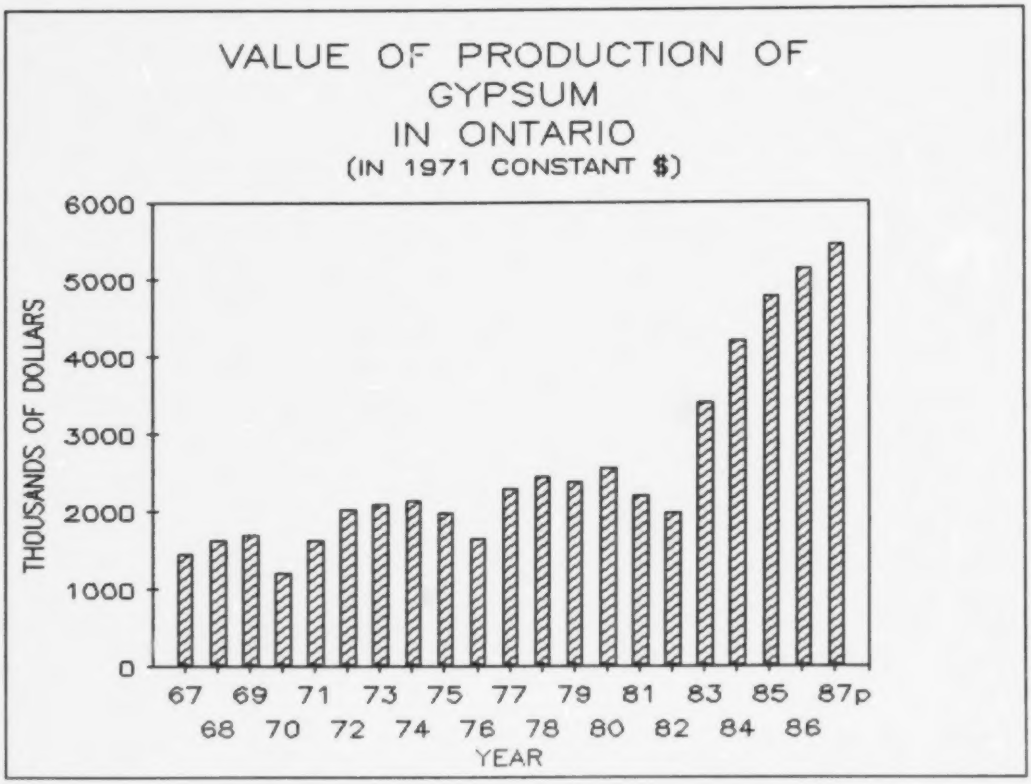
As a result of increased building construction, the production of gypsum in Ontario increased by 18% between 1985 and 1986. Estimates for 1987 are for a 9% increase in production over the previous year. Although the structure of the industry is unlikely to change, building material plants have sufficient capacity to meet short-term regional demand as well as handling the increased demand from the United States.

In the above chart, production is taken as the tonnage of crude gypsum shipped from quarries or mines in lump, crushed or fine ground form. The value is that reported by the operators.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION



VOLUME OF PRODUCTION OF GYPSUM IN ONTARIO



VALUE OF PRODUCTION OF GYPSUM IN ONTARIO (IN 1971 CONSTANT $)

VOLUME AND VALUE OF PRODUCTION OF IRON ORE IN ONTARIO

YEAR	VOLUME OF PRODUCTION IN 000'S SHORT TONS	TONNE	VALUE OF PRODUCTION IN 000'S CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	UNIT VALUE 1987 DOLLARS/TONNE
1967	8 650	7 847	99 904	116 303	398 220	50.75
1968	10 907	9 895	127 138	143 335	490 778	49.60
1969	10 517	9 541	128 166	138 259	473 400	49.62
1970	11 828	10 730	144 765	149 551	512 063	47.72
1971	11 179	10 141	136 205	136 205	466 367	45.99
1972	11 755	10 664	139 515	132 998	455 384	42.70
1973	12 424	11 271	152 469	134 097	459 149	40.74
1974	12 022	10 906	180 090	139 173	476 528	43.69
1975	10 476	9 504	219 024	149 504	511 903	53.86
1976	11 112	10 081	252 318	157 305	538 614	53.43
1977	11 375	10 320	287 811	167 624	573 945	55.62
1978	10 582	9 600	308 367	168 783	577 914	60.20
1979	8 681	7 875	287 191	143 095	489 956	62.22
1980	7 241	6 569	261 999	117 646	402 821	61.32
1981	5 947	5 395	245 463	99 660	341 236	63.25
1982	4 024	3 650	193 446	70 549	241 561	66.18
1983	4 206	3 816	183 793	63 268	216 629	56.77
1984	5 016	4 551	236 349	78 469	268 678	59.04
1985	4 770	4 328	232 496	74 161	253 929	58.68
1986 (R)	3 813	3 459	176 488	53 611	183 565	53.07
1987 (P)	3 543	3 214	149 562	43 680	149 562	46.53
TOTAL	180 068	163 357		2 477 276	8 482 202	

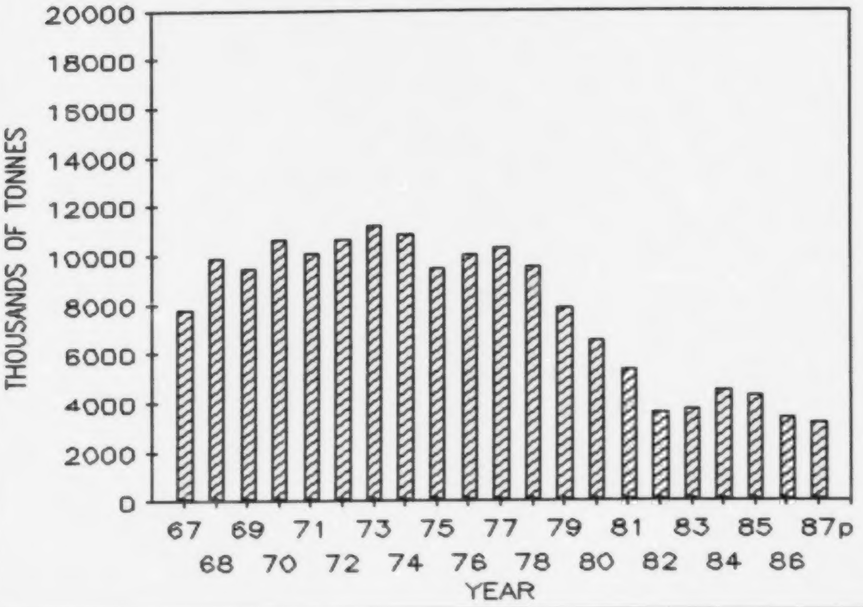
Iron ore is produced in different forms: pellets and sinter. The ore is processed into iron and steel products.

In Ontario, iron ore is mined by Dofasco Inc. from its mines in Kirkland Lake and Temagami and by Algoma Steel Corp. Ltd. in Wawa. Production from these mines represented approximately 10% of country's total iron output in the period from 1985-1987.

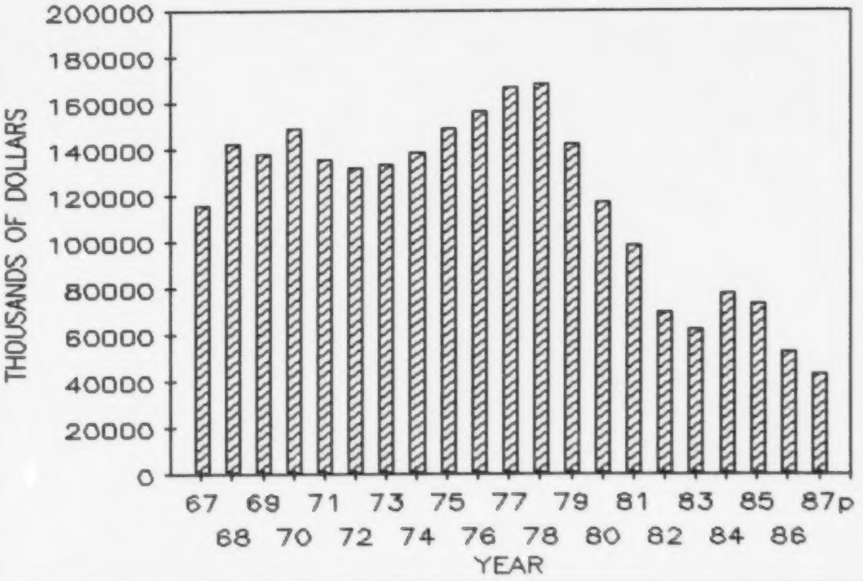
Global iron consumption decreased in 1986 from the previous year because of a drop in world steel production. World production increased about 1% from 1985 to 1986 resulting in excess world supply. Although an increase in productivity in many Canadian iron mines has lowered production costs, increasing output from Brazil, China and India is providing a major source of competition to Canadian producers.

In the chart above, iron ore production figures represent product shipments from specific locations at the values shown by the shippers.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION



VOLUME OF PRODUCTION OF
IRON ORE
IN ONTARIO



VALUE OF PRODUCTION OF
IRON ORE
IN ONTARIO
(IN 1971 CONSTANT $)

VOLUME AND VALUE OF PRODUCTION OF LEAD IN ONTARIO

YEAR	VOLUME OF PRODUCTION IN 000'S POUNDS	KG	VALUE OF PRODUCTION IN 000'S CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	UNIT VALUE 1987 DOLLARS/KG
1967	11 059	5 016	1 548	1 802	6 171	1.23
1968	25 801	11 703	3 468	3 909	13 386	1.14
1969	24 193	10 974	3 670	3 959	13 556	1.24
1970	23 920	10 850	3 784	3 909	13 385	1.23
1971	17 831	8 088	2 407	2 407	8 242	1.02
1972	21 211	9 621	3 272	3 120	10 681	1.11
1973	22 992	10 429	3 711	3 264	11 175	1.07
1974	20 222	9 172	4 187	3 236	11 079	1.21
1975	13 651	6 192	2 766	1 888	6 465	1.04
1976	15 225	6 906	3 449	2 150	7 362	1.07
1977	17 942	8 138	5 649	3 290	11 264	1.38
1978	15 565	7 060	5 732	3 137	10 741	1.52
1979	15 363	6 969	9 206	4 587	15 706	2.25
1980	19 753	8 960	9 088	4 081	13 972	1.56
1981	7 459	3 384	4 009	1 628	5 573	1.65
1982	12 559	5 697	3 816	1 392	4 765	.84
1983	14 427	6 544	2 865	986	3 377	.52
1984	19 690	8 931	6 311	2 095	7 174	.80
1985	8 420	3 819	1 907	608	2 083	.55
1986 (R)	13 371	6 065	4 130	1 254	4 295	.71
1987 (P)	18 739	8 500	8 984	2 624	8 984	1.06
TOTAL	359 393	163 018		55 326	189 436	

In Canada, lead production is mainly a by-product of zinc mining. Although production of this metal in Ontario represents only 2% of total lead production in Canada, it has increased by 40% in volume and by 118% in value from 1986 to 1987. The increase reflects a jump in the average price of lead from $0.68/kg in 1986 to $1.06/kg in 1987. Labour disputes in the United States also influenced the rise in price.

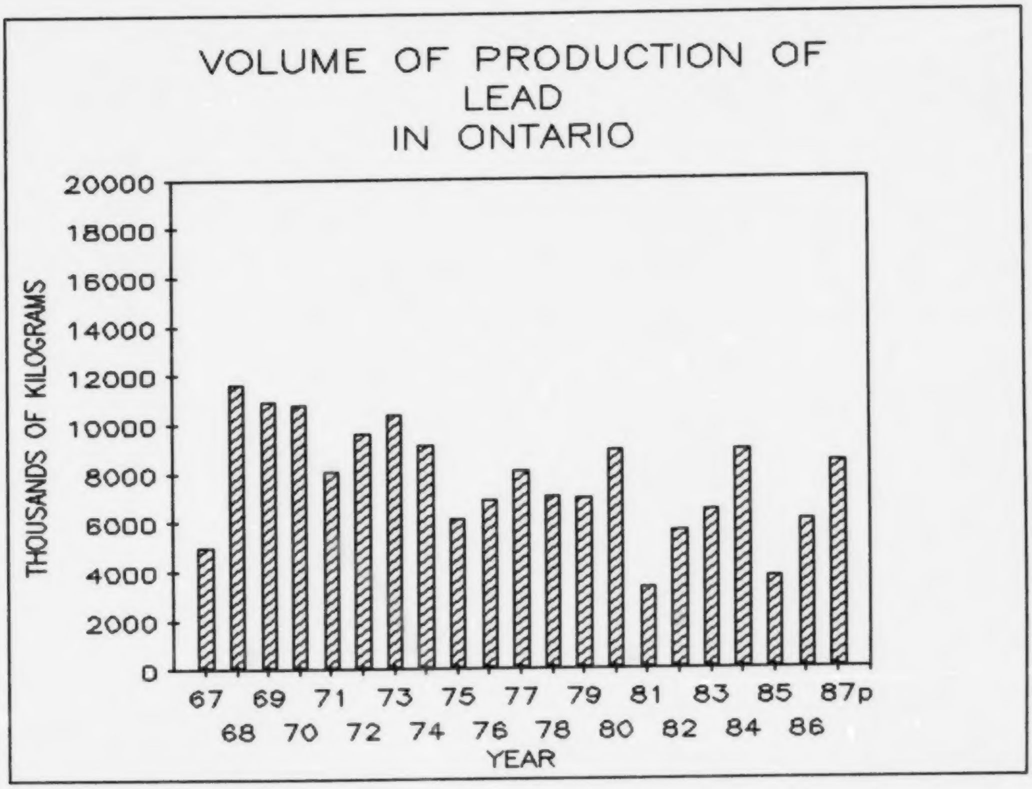
Batteries account for about 60% of total lead consumption. Other uses include petroleum additives, pigments and compounds, rolled and extruded products, cable sheathing and alloys. In the short and medium term, consumption of batteries will grow while lead additives in gasoline will decrease. Batteries in automatic guided vehicles (AGV) and asphalt additives are becoming growing markets for lead.

World refined lead production has remained approximately in equilibrium with consumption since 1982. Future world lead production is forecast to decrease while consumption is to increase. Secondary scrap sources are expected to represent about 45% of metal supplies.

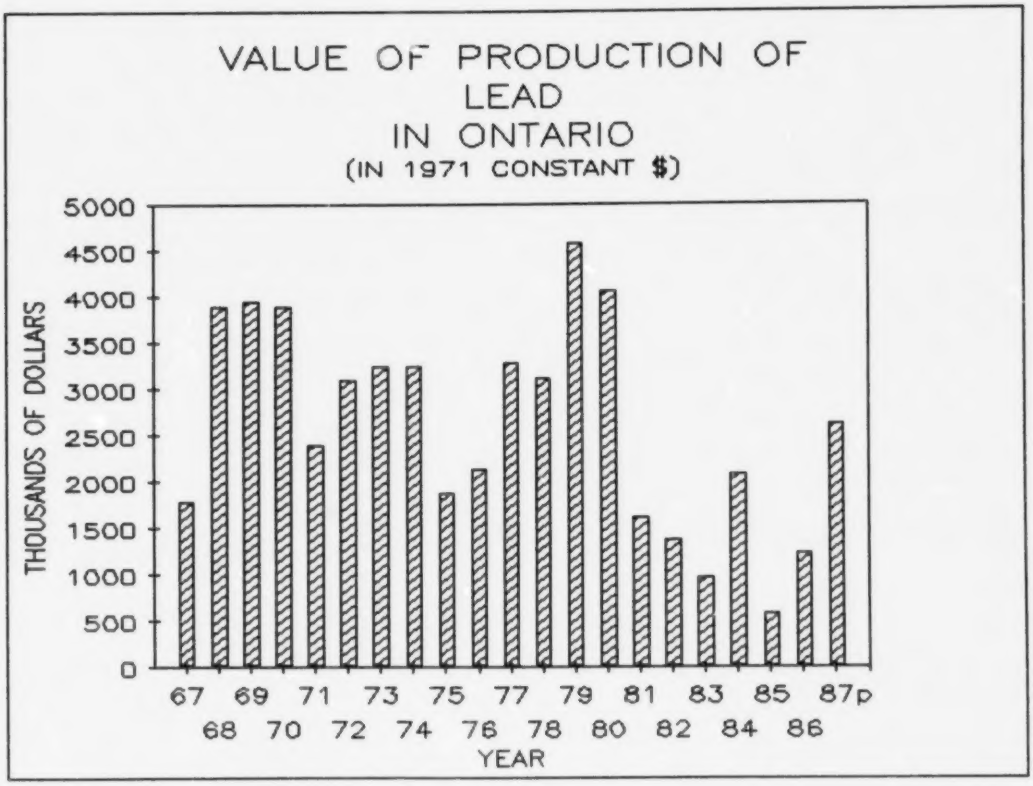
In the chart above, production includes recoverable lead (metal paid for) in ores and concentrates shipped either for export or to Brunswick Mining and Smelting Corporation, Belledune, N.B. or Cominco, Trail, B.C.

Value is based on settlement value reported or when settlement value is not available it is based on the average yearly industry price x volume.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION



VOLUME OF PRODUCTION OF LEAD IN ONTARIO



VALUE OF PRODUCTION OF LEAD IN ONTARIO (IN 1971 CONSTANT $)

VOLUME AND VALUE OF PRODUCTION OF LIME IN ONTARIO

	VOLUME OF PRODUCTION IN 000'S		VALUE OF PRODUCTION IN 000'S			UNIT VALUE
YEAR	SHORT TONS	TONNE	CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	1987 DOLLARS/TONNE
1967	974	884	11 102	12 924	44 252	50.06
1968	1 014	920	11 772	13 272	45 442	49.41
1969	1 129	1 024	12 434	13 413	45 925	44.83
1970	1 164	1 056	13 810	14 267	48 849	46.27
1971	1 167	1 059	16 886	16 886	57 816	54.61
1972	1 192	1 082	18 475	17 612	60 304	55.76
1973	1 307	1 186	20 626	18 141	62 114	52.37
1974	1 414	1 283	26 304	20 328	69 602	54.26
1975	1 173	1 064	27 063	18 473	63 252	59.43
1976	1 286	1 166	35 255	21 979	75 258	64.52
1977	1 327	1 204	39 971	23 280	79 710	66.21
1978	1 479	1 342	48 493	26 543	90 882	67.73
1979	1 453	1 318	51 921	25 870	88 579	67.21
1980	1 856	1 683	74 389	33 403	114 373	67.94
1981	2 024	1 836	94 700	38 449	131 649	71.70
1982	1 697	1 540	82 813	30 202	103 410	67.16
1983	1 749	1 586	89 252	30 724	105 197	66.31
1984	1 815	1 647	98 101	32 570	111 520	67.73
1985	1 822	1 652	109 976	35 080	120 114	72.69
1986 (R)	1 754	1 591	96 341	29 265	100 205	62.98
1987 (P)	1 692	1 535	116 222	33 943	116 222	75.71
TOTAL	30 488	27 658		506 624	1 734 675	

Lime is a high-bulk, low-cost commodity which uses limestone, a carbonate rock, as its primary manufacturing material. It is used as a flux material in the steel industry, as a digesting liquor and bleaching agent in the pulp and paper industry and in the mining industry to control hydrogen-ion concentrations, recover sodium carbonate and to neutralize waste sludge. Other uses include water treatment, soil stabilization, construction and sulphur removal from stack refractories.

Ontario produces lime in Sault Ste. Marie, Amherstburg, Beachville, Guelph, Haley, Spragge, Ingersol and Dundas. The Province accounts for over 66% of Canada's total output.

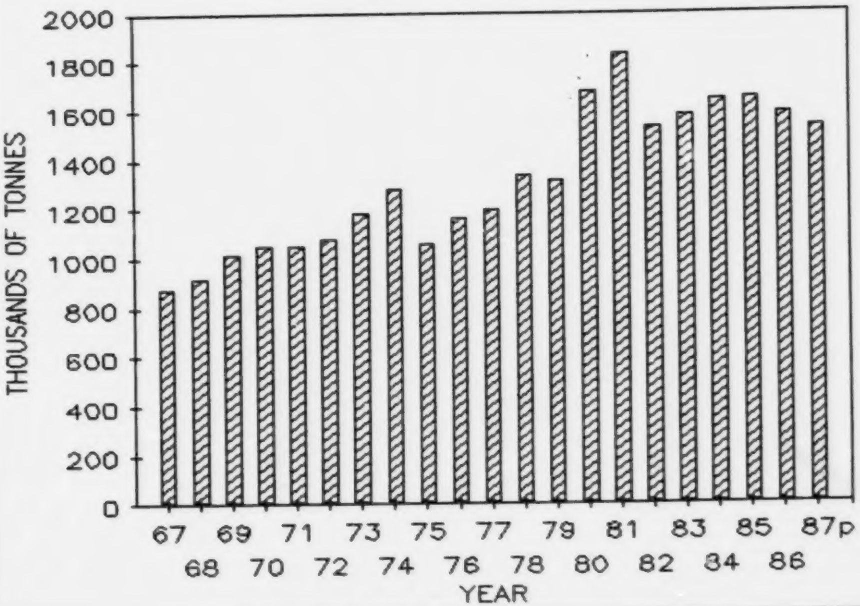
In 1986, lime production in Ontario decreased by 3.7% from the previous year. This decrease was attributed primarily to a drop in production in the iron and steel industry. Output in 1987 is expected to continue at a rate similar to that of 1986.

The short term market for lime in Ontario is directly related to the performance of the steel, pulp and paper and mining industries.

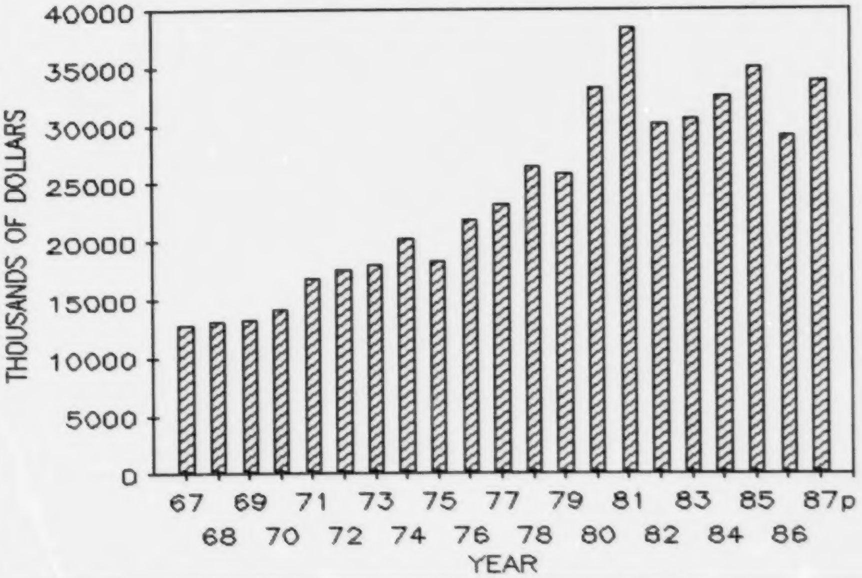
In the above chart, production represents the tonnage of hydrated and quicklime shipped together with the tonnage of these limes produced and consumed by the producers of chemicals and allied products. The values taken are as reported by the producer.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

VOLUME OF PRODUCTION OF LIME IN ONTARIO



VALUE OF PRODUCTION OF LIME IN ONTARIO (IN 1971 CONSTANT $)



VOLUME AND VALUE OF PRODUCTION OF MAGNESIUM IN ONTARIO

	VOLUME OF PRODUCTION IN 000'S		VALUE OF PRODUCTION IN 000'S			UNIT VALUE
YEAR	POUNDS	KG	CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	1987 DOLLARS/KG
1967	17 775	8 062	5 653	6 581	22 534	2.79
1968	19 857	9 007	6 182	6 970	23 864	2.65
1969	21 275	9 650	7 264	7 836	26 830	2.78
1970	20 707	9 393	7 141	7 377	25 258	2.69
1971	14 467	6 562	5 164	5 164	17 681	2.69
1972	11 848	5 374	4 537	4 325	14 809	2.76
1973	13 770	6 246	5 483	4 822	16 510	2.64
1974	13 133	5 957	9 260	7 156	24 503	4.11
1975	8 434	3 826	8 788	5 999	20 540	5.37
1976	13 430	6 092	12 825	7 996	27 378	4.49
1977	16 827	7 633	17 767	10 347	35 430	4.64
1978	18 323	8 311	20 155	11 032	37 774	4.54
1979	19 875	9 015	24 444	12 179	41 702	4.63
1980	20 397	9 252	27 822	12 493	42 776	4.62
1981	18 845	8 548	29 439	11 953	40 926	4.79
1982	16 822	7 630	27 812	10 143	34 729	4.55
1983	13 184	5 980	21 978	7 566	25 905	4.33
1984	16 728	7 588	30 927	10 268	35 157	4.63
1985	18 621	8 446	36 370	11 601	39 722	4.70
1986 (R)	19 286	8 748	41 001	12 455	42 645	4.87
TOTAL	333 604	151 320		174 263	596 673	

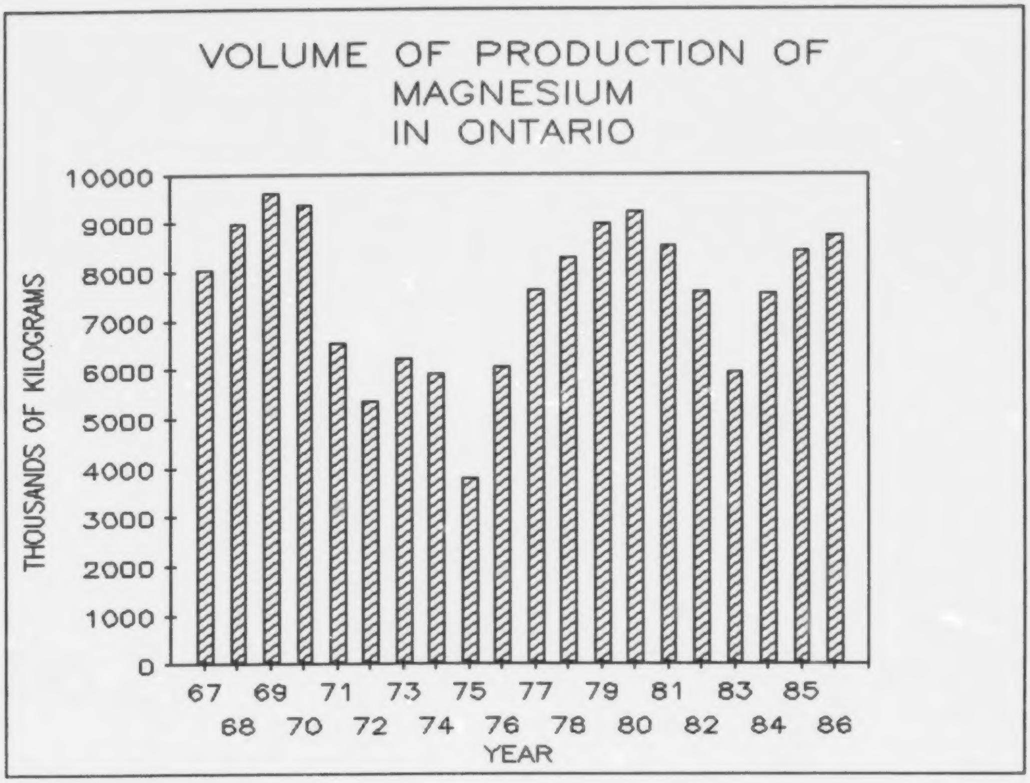
Ontario is the only producer of primary magnesium in Canada. Magnesium is recovered from dolomitic ore near Haley Station, west of Ottawa. It is used as an alloying agent with aluminum, in diecast products, especially in the automotive industry, and in the desulphurization of steel. A potential use for magnesium is as an aluminum-magnesium alloy in the aluminum foil industry.

Canada ranks seventh in world production of magnesium. New production is expected to start in British Columbia and Alberta by 1989. Norsk Hydro has commenced construction of a magnesium plant in Quebec. Production in Ontario has increased steadily since 1983 and increased 4% from 1986 to 1987.

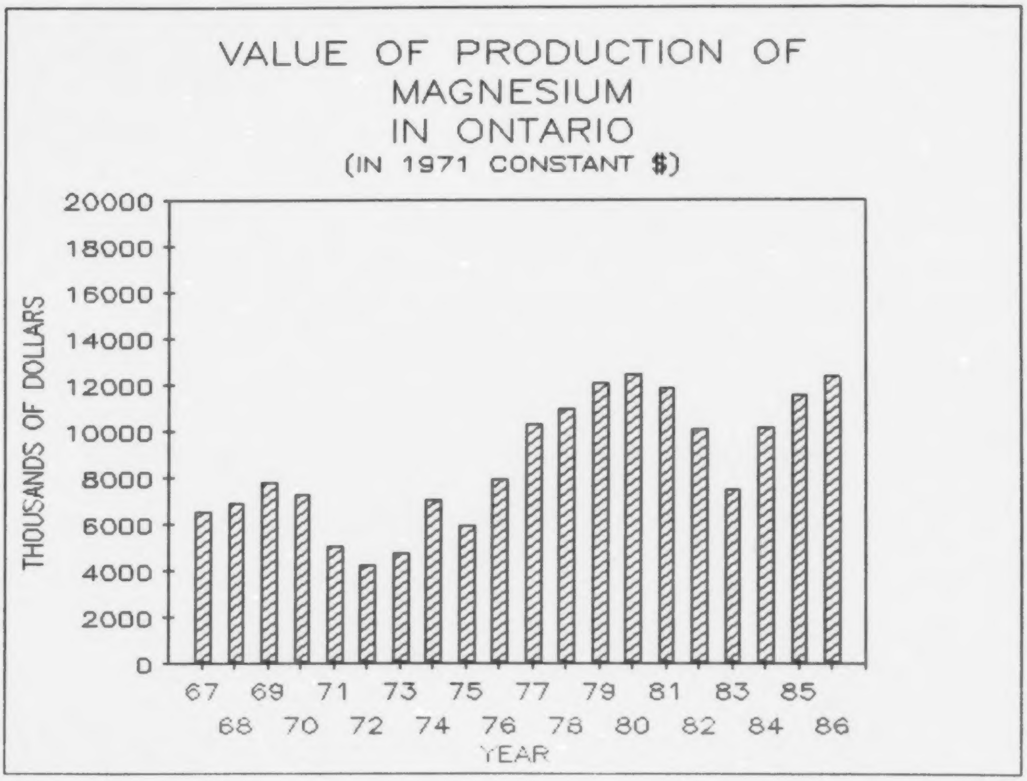
World magnesium producers are presently operating at undercapacity. With the planned new global capacity, less efficient producers may be forced to cut back.

In the chart above, output figures represent magnesium metal plus magnesium content of alloys, valued at the average yearly industry price x volume.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION



VOLUME OF PRODUCTION OF MAGNESIUM IN ONTARIO



VALUE OF PRODUCTION OF MAGNESIUM IN ONTARIO (IN 1971 CONSTANT $)

VOLUME AND VALUE OF PRODUCTION OF NATURAL GAS IN ONTARIO

	VOLUME OF PRODUCTION IN 000'S		VALUE OF PRODUCTION IN 000'S			UNIT VALUE
YEAR	M CU FEET	K CU M	CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	1987 DOLLARS/K CU M
1967	14	403	5 427	6 318	21 632	53.73
1968	12	339	4 599	5 185	17 753	52.36
1969	11	318	4 275	4 612	15 791	49.62
1970	17	483	6 488	6 702	22 949	47.49
1971	16	460	6 333	6 333	21 685	47.10
1972	12	350	4 768	4 545	15 562	44.41
1973	10	270	3 678	3 235	11 076	41.05
1974	8	213	3 248	2 510	8 594	40.27
1975	11	310	6 508	4 442	15 211	49.12
1976	5	140	4 860	3 030	10 374	73.88
1977	9	242	10 267	5 980	20 474	84.77
1978	13	356	21 377	11 701	40 063	112.51
1979	10	292	21 420	10 673	36 543	125.15
1980	16	445	33 481	15 034	51 478	115.62
1981	15	419	34 556	14 030	48 039	114.58
1982	15	436	41 360	15 084	51 648	118.36
1983	16	459	45 931	15 811	54 137	117.87
1984	19	548	68 466	22 731	77 832	141.98
1985	21	590	73 143	23 331	79 886	135.43
1986 (R)	19	529	68 269	20 738	71 006	134.35
1987 (P)	18	508	62 050	18 122	62 050	122.15
TOTAL	287	8 110		220 147	753 783	

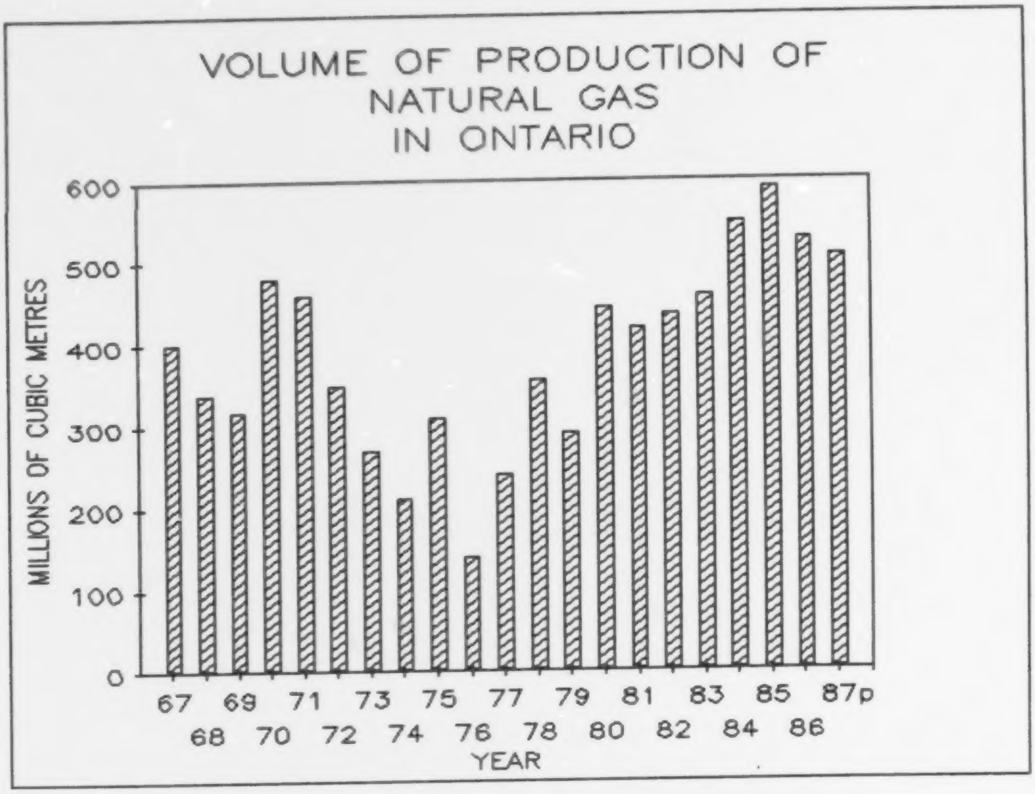
Natural gas accounts for 40% of all energy used by Canadian manufacturers with the petro-chemical industry the major gas consumer. The pulp and paper, iron and steel and petroleum refining industries are other major consumers.

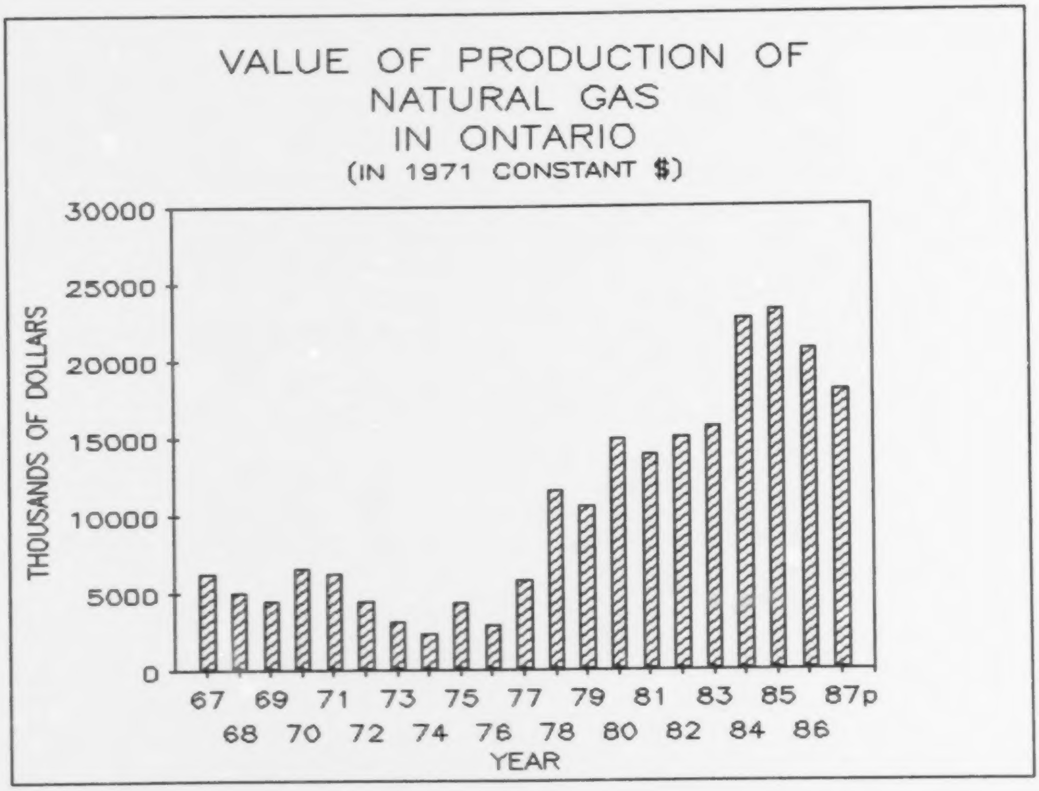
The natural gas produced in Ontario is 1% of Canada's total natural gas production. Although the industry has grown quickly to great importance within the Canadian economy, the drop in global oil prices in 1986 depressed gas prices making fuel oil again a competitive option. Decreasing oil prices deterred natural gas exploration and development in Canada, with capital expenditures for 1987 11% below the 1986 level. Gas production in Ontario for 1987 is expected to decline by 4% from 1986 levels.

Although demand for vehicle conversions from gasoline to natural gas is expected to increase in Ontario, it will not have a large impact on the demand for natural gas.

In the above chart, production is taken as all new production less flared field production as measured at the first well head metering point. It also includes gas reproduced from fields less injected gas. Natural gas produced by gas processing plants is valued after deducting quantity returned to formation. In addition, for purposes of valuation, processing shrinkage is deducted from natural gas volume. Natural gas sold in Ontario contains approximately 1000 BTU per cubic foot or 37 MJ per cubic metre.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION


VOLUME OF PRODUCTION OF NATURAL GAS IN ONTARIO


VALUE OF PRODUCTION OF NATURAL GAS IN ONTARIO (IN 1971 CONSTANT $)

VOLUME AND VALUE OF PRODUCTION OF NEPHELINE SYENITE IN ONTARIO

	VOLUME OF PRODUCTION IN 000'S		VALUE OF PRODUCTION IN 000'S			UNIT VALUE
YEAR	SHORT TONS	TONNE	CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	1987 DOLLARS/TONNE
1967	402	364	4 753	5 533	18 945	52.00
1968	427	387	4 738	5 342	18 290	47.26
1969	501	454	5 935	6 403	21 923	48.28
1970	487	441	5 801	5 993	20 520	46.48
1971	517	469	6 206	6 206	21 249	45.29
1972	559	508	5 902	5 626	19 265	37.96
1973	569	517	7 860	6 913	23 671	45.82
1974	617	560	9 179	7 094	24 289	43.37
1975	516	468	8 869	6 054	20 730	44.25
1976	595	540	10 566	6 588	22 556	41.76
1977	633	575	11 984	6 979	23 898	41.59
1978	660	599	14 182	7 762	26 578	44.36
1979	668	606	15 180	7 564	25 898	42.76
1980	661	600	16 544	7 429	25 437	42.42
1981	648	588	17 532	7 118	24 372	41.48
1982	609	553	17 882	6 522	22 330	40.39
1983	577	523	18 913	6 510	22 292	42.60
1984	574	521	18 609	6 178	21 155	40.63
1985	515	467	18 603	5 934	20 318	43.49
1986 (R)	515	467	19 848	6 029	20 643	44.16
1987 (P)	550	499	21 404	6 251	21 404	42.89
TOTAL	11 800	10 706		136 028	465 763	

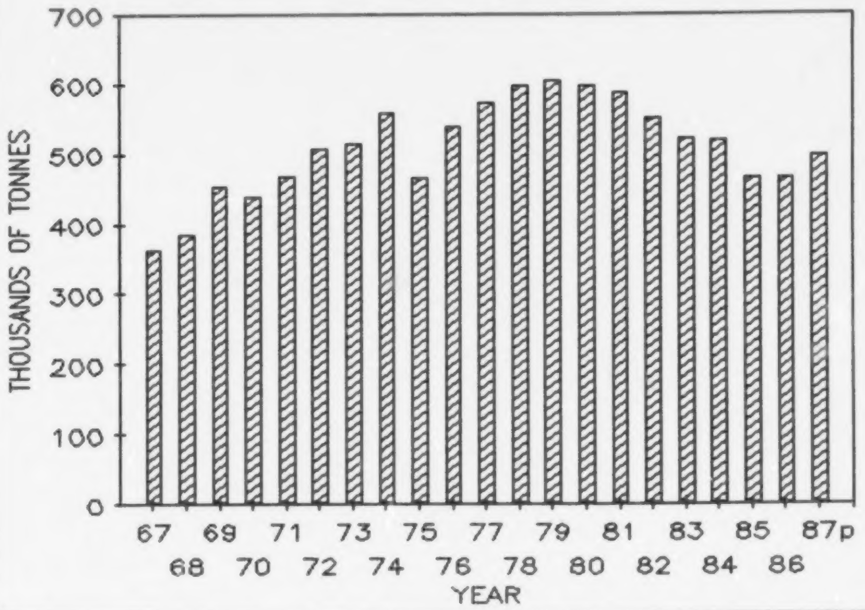
Nepheline syenite is produced as a raw material for the manufacture of glass and ceramics. Other uses include glazes, enamels, fiberglass and fillers in paints, plastics and foam rubber. The glass and glass fibre industry account for 60% of nepheline syenite consumption in Canada and insulation and ceramic products account for 17% consumption.

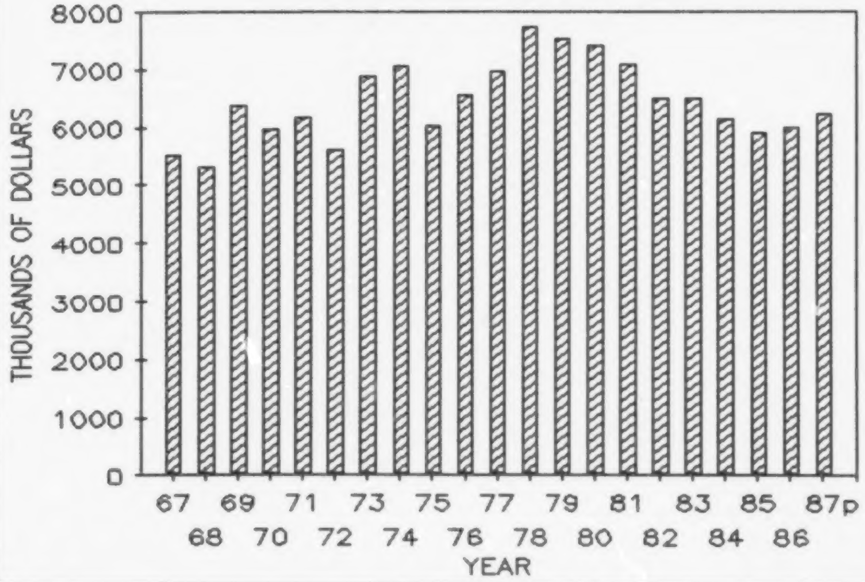
In Ontario, nepheline syenite is produced near Peterborough. Production in 1986 remained unchanged from the previous year and is expected to increase by 7% in 1987. This increase is attributed to a rise in exports to the United States. Overall consumption in Canada has been slowly declining. This is largely due to the introduction and increased use of plastics, paper and aluminum, as well as the increased recycling of glass wastes and the development of thinner glass containers.

The development of strong, lightweight glass should make glass more competitive with other materials used for containers. Although new products will require less raw materials, the additional demand for glass should offset the drop in nepheline syenite required for each unit produced.

In the above chart, production of crude and ground nepheline syenite is the amount of the various grades shipped at the total selling price, f.o.b. works.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION


VOLUME OF PRODUCTION OF NEPHELINE SYENITE IN ONTARIO


VALUE OF PRODUCTION OF NEPHELINE SYENITE IN ONTARIO (IN 1971 CONSTANT $)

VOLUME AND VALUE OF PRODUCTION OF NICKEL IN ONTARIO

YEAR	VOLUME OF PRODUCTION IN 000'S POUNDS	KG	VALUE OF PRODUCTION IN 000'S CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	UNIT VALUE 1987 DOLLARS/KG
1967	380 118	172 418	352 239	410 057	1 404 035	8.14
1968	407 493	184 836	405 168	456 785	1 564 031	8.46
1969	293 561	133 157	329 076	354 991	1 215 488	9.13
1970	448 509	203 440	608 428	628 542	2 152 127	10.58
1971	431 507	195 728	583 946	583 946	1 999 432	10.22
1972	378 855	171 846	519 935	495 649	1 697 101	9.88
1973	393 293	178 395	574 786	505 529	1 730 930	9.70
1974	460 879	209 051	749 782	579 430	1 983 968	9.49
1975	394 837	179 095	811 329	553 808	1 896 239	10.59
1976	413 225	187 436	882 305	550 065	1 883 424	10.05
1977	396 821	179 995	927 518	540 197	1 849 635	10.28
1978	206 082	93 477	473 685	259 269	887 738	9.50
1979	194 987	88 445	566 279	282 152	966 089	10.92
1980	321 010	145 607	1 154 869	518 576	1 775 604	12.19
1981	287 193	130 269	1 001 218	406 503	1 391 868	10.68
1982	140 998	63 956	440 631	160 697	550 227	8.60
1983	194 650	88 292	550 125	189 372	648 409	7.34
1984	291 985	132 442	886 903	294 457	1 008 219	7.61
1985	288 882	131 035	930 760	296 893	1 016 563	7.76
1986 (R)	268 635	121 851	731 440	222 187	760 769	6.24
1987 (P)	289 970	131 528	902 417	263 556	902 417	6.86
TOTAL	6 883 490	3 122 299		8 552 661	29 284 313	

Nickel in Ontario is mined from nickel-copper ores of the Sudbury Basin. Decreasing trends in nickel production in Ontario from 1970 to 1986 reflect displacement by lesser developed countries and the U.S.S.R., and poor market conditions. However, increased volume in 1987 is attributed to increased consumption and higher price levels. Currently, Ontario produces 70% of the country's nickel.

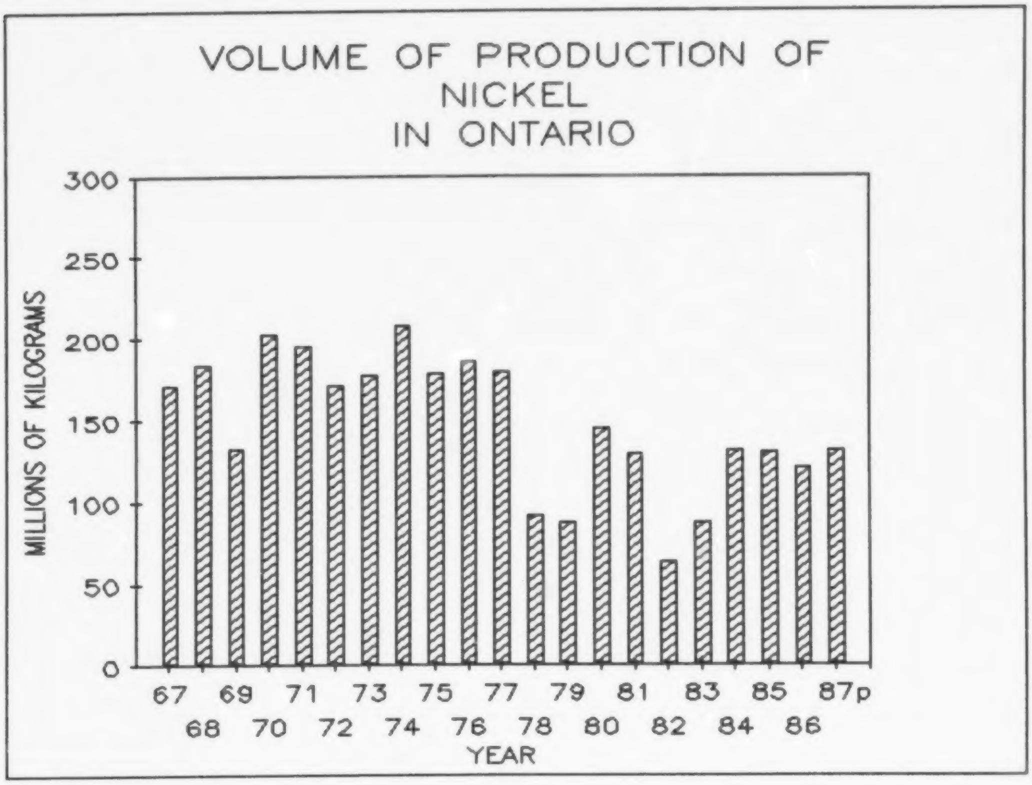
Stainless steel production accounts for over 55% of refined nickel consumption. Other uses include nickel alloys, iron castings, superalloys, plating, and catalysts.

In 1985 and 1986, nickel supply and demand were in equilibrium, while in 1987 and 1988, demand is expected to exceed supply. In the medium term, nickel consumption is expected to increase because of a higher demand for stainless steel in Europe, the U.S and Japan.

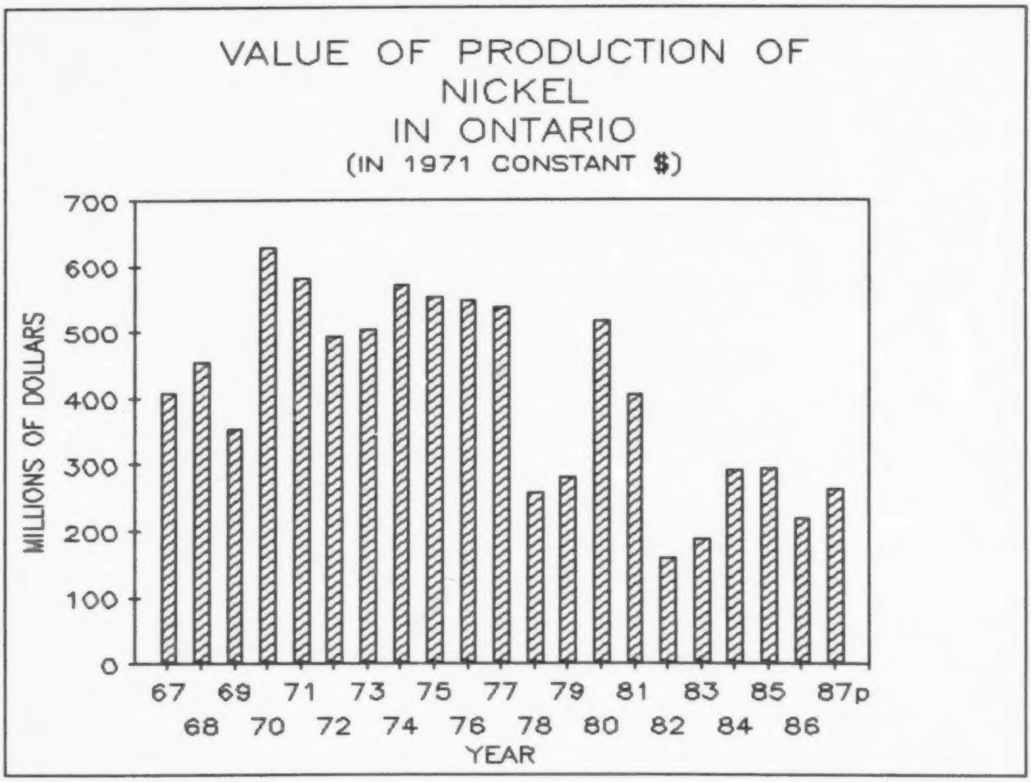
Production figures in the chart above include:

(a) Refined and electrolytic nickel produced at Canadian refineries, valued at the average price obtained for such products sold during the year.
(b) Nickel in nickel oxides and in nickel salts sold from Canadian smelters and refineries during the year at the total selling value of these products.
(c) Nickel in matte shipped for export from Canada valued at average yearly industry price x volume.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION



VOLUME OF PRODUCTION OF NICKEL IN ONTARIO



VALUE OF PRODUCTION OF NICKEL IN ONTARIO (IN 1971 CONSTANT $)

VOLUME AND VALUE OF PRODUCTION OF PEAT IN ONTARIO

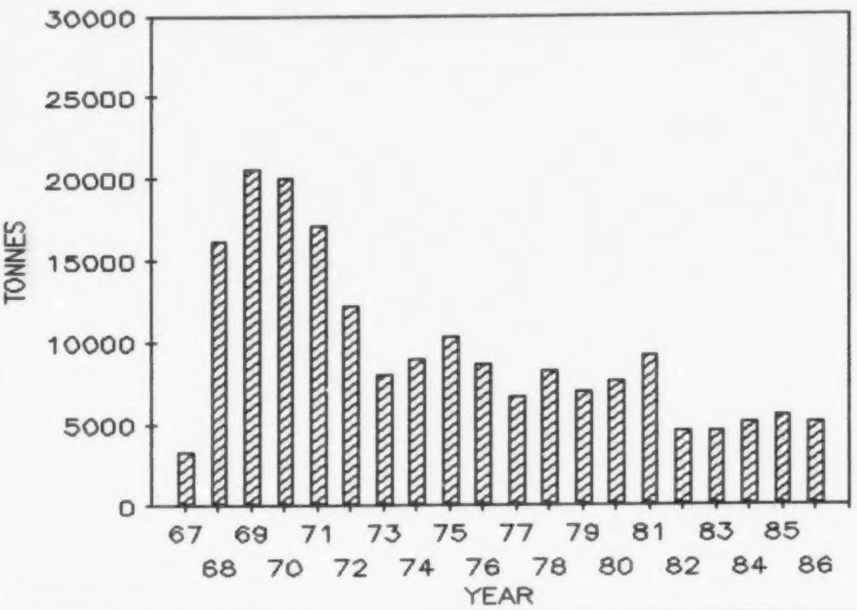
	VOLUME OF PRODUCTION IN 000'S		VALUE OF PRODUCTION IN 000'S			UNIT VALUE
YEAR	SHORT TONS	TONNE	CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	1987 DOLLARS/TONNE
1967	4	3	55	64	220	64.71
1968	18	16	484	545	1 867	115.09
1969	23	21	487	525	1 799	87.04
1970	22	20	774	799	2 736	135.69
1971	19	17	653	653	2 234	129.70
1972	14	12	571	544	1 863	151.44
1973	9	8	548	482	1 650	204.48
1974	10	9	482	372	1 275	141.43
1975	11	10	875	597	2 044	197.25
1976	10	9	785	490	1 676	192.24
1977	7	7	608	354	1 212	180.89
1978	9	8	782	428	1 465	176.04
1979	8	7	676	337	1 153	163.82
1980	9	8	939	422	1 444	186.96
1981	10	9	1 202	488	1 671	181.53
1982	5	5	886	323	1 106	236.72
1983	5	5	711	245	839	181.15
1984	6	5	904	300	1 028	197.43
1985	6	6	908	290	992	177.87
1986 (R)	6	5	785	238	817	157.59
TOTAL	211	190		8 496	29 091	

Peat is an intermediate compound resulting from biochemical decomposition of plant matter. In its raw form it is ligneous, fibrous and elastic. Canada is the fourth largest producer, accounting for 0.25% of total world production. Ontario accounts for less than 1% of Canada's total peat output.

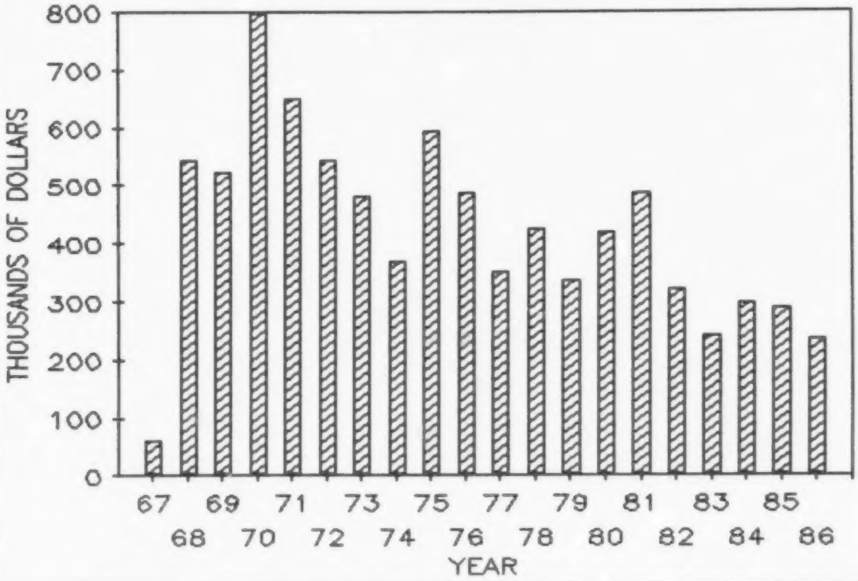
The major market for peat is the agricultural and horticultural industry which utilizes over 90% of total production. It is also used in the production of paper towels, chemicals, metallurgical coke and activated carbon. In some countries peat is used as a fuel to produce steam for generating energy.

While the production of peat in Ontario will likely remain unchanged, foreign demand, particularly from Japan, will increase. Canadian production should continue to grow at a rate of 3.5% per year, until 1990.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION



VOLUME OF PRODUCTION OF PEAT IN ONTARIO



VALUE OF PRODUCTION OF PEAT IN ONTARIO (IN 1971 CONSTANT $)

VOLUME AND VALUE OF PRODUCTION OF PETROLEUM IN ONTARIO

	VOLUME OF PRODUCTION IN 000'S		VALUE OF PRODUCTION IN 000'S			UNIT VALUE
YEAR	BARRELS	CU M	CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	1987 DOLLARS/CU M
1967	1 240	197	3 524	4 103	14 047	71.24
1968	1 151	183	3 167	3 570	12 225	66.82
1969	1 162	185	3 117	3 362	11 513	62.33
1970	1 048	167	2 840	2 934	10 045	60.28
1971	958	152	2 727	2 727	9 336	61.29
1972	878	140	2 499	2 382	8 156	58.43
1973	809	129	2 866	2 521	8 630	67.13
1974	734	117	4 342	3 355	11 489	98.45
1975	704	112	5 046	3 444	11 794	105.37
1976	621	99	5 216	3 252	11 134	112.78
1977	617	98	6 627	3 860	13 215	134.79
1978	594	94	8 166	4 469	15 303	162.08
1979	579	92	8 259	4 115	14 090	153.15
1980	591	94	9 787	4 395	15 048	160.28
1981	566	90	11 112	4 512	15 448	171.67
1982	539	86	14 761	5 383	18 433	215.24
1983	533	85	16 110	5 546	18 988	223.94
1984	568	90	17 276	5 736	19 639	217.31
1985	710	113	24 737	7 891	27 017	239.19
1986 (R)	854	136	17 343	5 268	18 039	132.82
1987 (P)	837	133	18 933	5 529	18 933	142.35
TOTAL	16 293	2 592		88 354	302 522	

Petroleum, or crude oil, is a liquid hydrocarbon. Despite the increasing competition from other energy sources, oil is still the dominant fuel used in Canada, representing 40% of the total energy consumed.

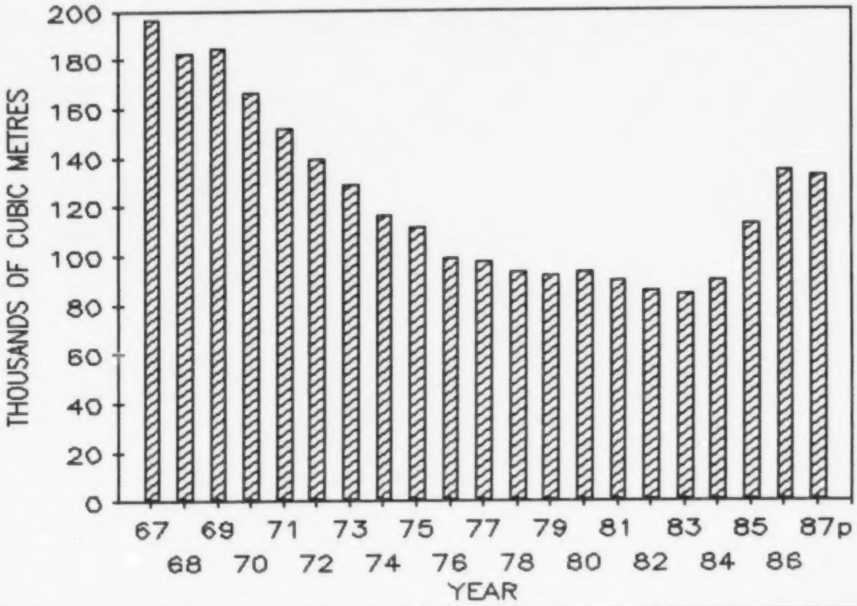
Ontario is a minor oil-producing region, accounting for slightly more than 1% of Canada's total production.

The collapse of world oil prices, beginning in 1985, discouraged exploration, drilling and investment in Canada. While production in Ontario increased by approximately 19% from 1985 to 1986, overall production in Canada remained steady. As a result of decreased investment within the petroleum industry, projections indicate that Ontario's petroleum output will decline by 1.7% in 1987.

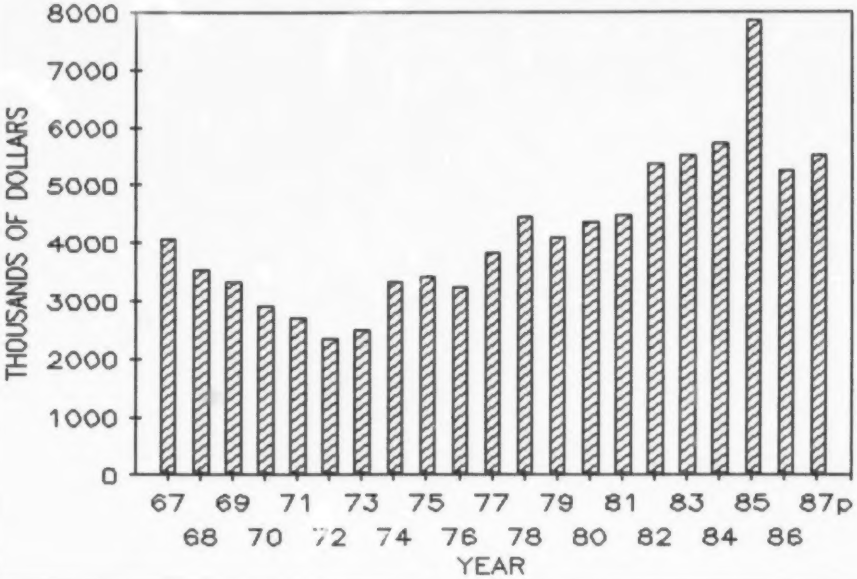
Although other forms of energy have challenged petroleum's share of Canada's energy market, oil will remain a very important fuel mainly because of its dominant role in transportation. The industry should recover when prices begin to improve.

In the above chart, production is taken as all production less that portion returned to formation, valued at well head prices. Production derived from crude bitumen (synthetic crude) is valued at the processing plant gate.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION



VOLUME OF PRODUCTION OF PETROLEUM IN ONTARIO



VALUE OF PRODUCTION OF PETROLEUM IN ONTARIO (IN 1971 CONSTANT $)

VOLUME AND VALUE OF PRODUCTION OF PLATINUM GROUP IN ONTARIO

	VOLUME OF PRODUCTION IN 000'S		VALUE OF PRODUCTION IN 000'S			UNIT VALUE
YEAR	TROY OUNCES	KG	CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	1987 DOLLARS/KG
1967	400	12	34 580	40 257	137 838	11082.04
1968	485	15	46 124	52 000	178 048	11806.90
1969	308	10	30 730	33 150	113 505	11830.80
1970	482	15	43 557	44 996	154 068	10267.77
1971	475	15	39 822	39 822	136 349	9225.88
1972	402	13	34 331	32 727	112 058	8953.21
1973	353	11	41 844	36 802	126 011	11480.62
1974	385	12	60 794	46 981	160 865	13447.97
1975	399	12	56 493	38 562	132 036	10633.46
1976	417	13	50 143	31 261	107 039	8256.61
1977	465	14	61 988	36 103	123 616	8540.54
1978	350	11	65 761	35 994	123 244	11320.31
1979	198	6	56 334	28 069	96 107	15611.87
1980	411	13	158 923	71 362	244 344	19125.22
1981	383	12	136 239	55 314	189 397	15908.99
1982	228	7	82 254	29 998	102 712	14456.29
1983	224	7	79 156	27 248	93 298	13397.13
1984	329	10	131 416	43 631	149 392	14581.93
1985	373	12	153 626	49 004	167 788	14471.98
1986 (R)	351	11	180 232	54 748	187 459	17155.53
TOTAL	7 418	231		828 029	2 835 174	

Platinum Group Metals (PGM) are platinum, palladium, rhodium, ruthenium, iridium and osmium of which platinum and palladium are significant. Of the many uses for PGMs (in particular platinum) none is more important than its role as an automobile catalyst. PGMs are also used in jewellery and electrical goods.

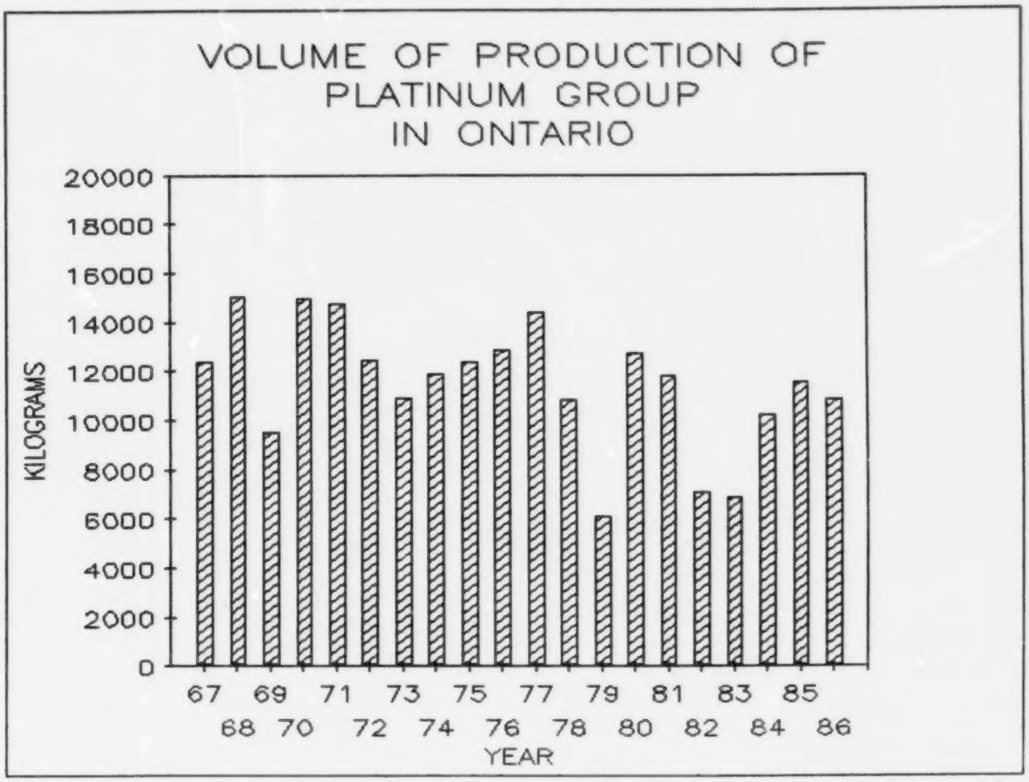
Canada produces about 5% of the Western World's PGM supply. Ontario's production represents about 90%. PGMs are a by-product of nickel-copper mining in Sudbury, Ontario where platinum:palladium ratios are 1:1 in the ore.

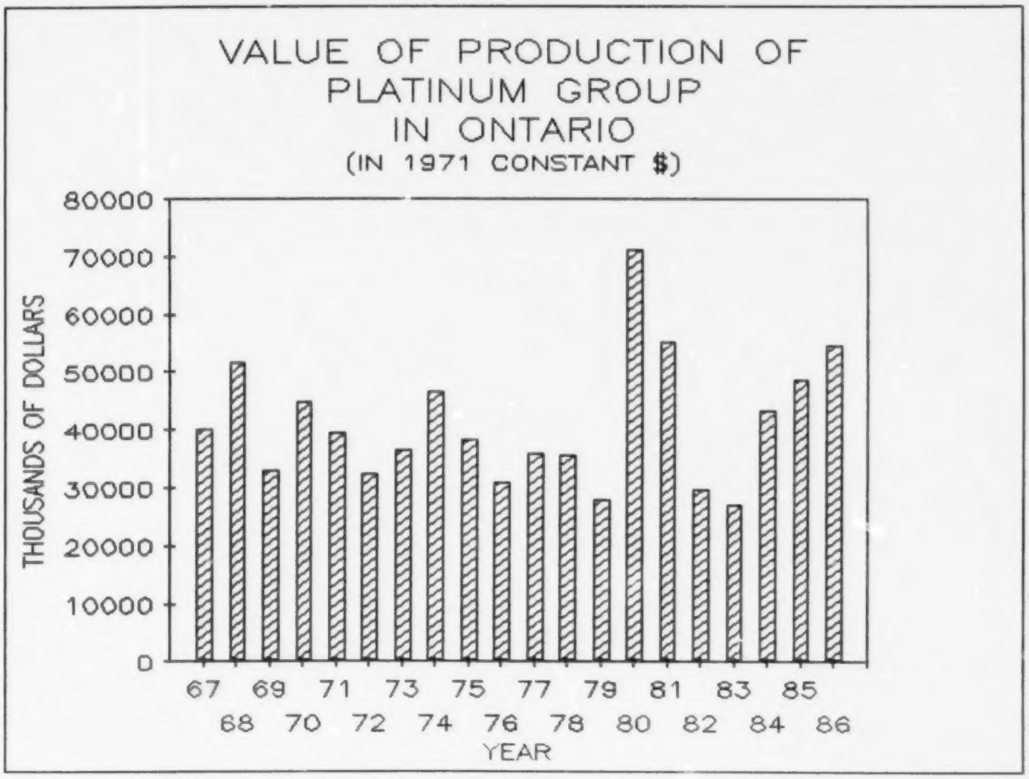
The main market for platinum is expected to remain the autocatalyst sector. Secondary recovery, especially from recycled autocatalysts in the U.S., is forecast to increase until 1990. World oversupply is anticipated in 1987 and 1988 as production increases. Some of this surplus however may be absorbed by the investment sector.

In the chart above, production includes recoverable metals in refinery products shipped for export.

Beginning with 1946, the platinum metals production is the assay content of concentrates and refinery residues shipped for export, plus the platinum group metal content of the matte shipped for export. Quantities as reported are valued at average yearly industry price x volume.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION


VOLUME OF PRODUCTION OF
PLATINUM GROUP
IN ONTARIO
KILOGRAMS
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
YEAR


VALUE OF PRODUCTION OF
PLATINUM GROUP
IN ONTARIO
(IN 1971 CONSTANT $)
THOUSANDS OF DOLLARS
80000
70000
60000
50000
40000
30000
20000
10000
0
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
YEAR

VOLUME AND VALUE OF PRODUCTION OF QUARTZ IN ONTARIO

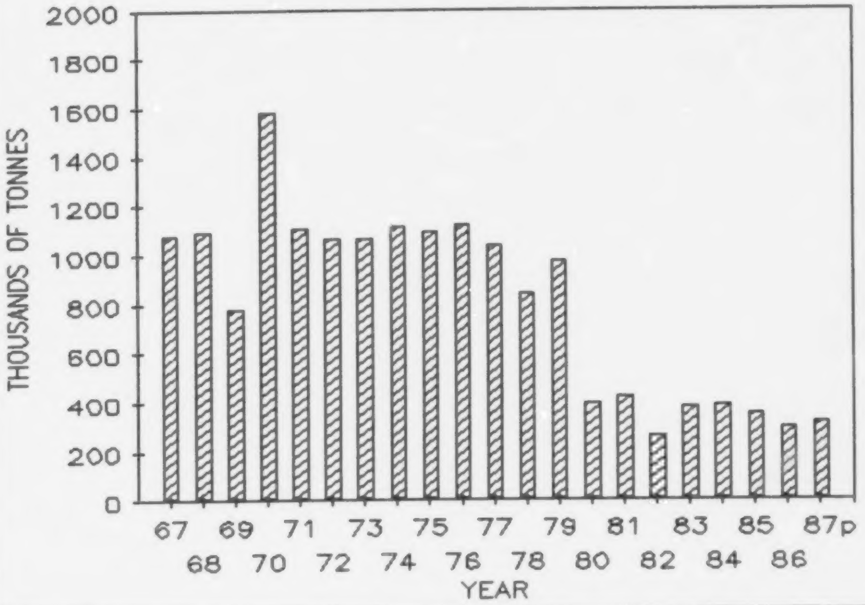
	VOLUME OF PRODUCTION IN 000'S		VALUE OF PRODUCTION IN 000'S			UNIT VALUE
YEAR	SHORT TONS	TONNE	CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	1987 DOLLARS/TONNE
1967	1 193	1 082	467	544	1 862	1.72
1968	1 206	1 094	573	646	2 214	2.02
1969	865	785	429	463	1 585	2.02
1970	1 748	1 586	1 212	1 252	4 286	2.70
1971	1 228	1 114	2 141	2 141	7 332	6.58
1972	1 178	1 068	2 750	2 622	8 977	8.40
1973	1 181	1 072	3 361	2 956	10 120	9.44
1974	1 237	1 122	3 850	2 975	10 187	9.08
1975	1 208	1 096	4 358	2 975	10 186	9.29
1976	1 242	1 127	5 203	3 244	11 107	9.86
1977	1 150	1 043	6 129	3 570	12 222	11.72
1978	933	847	6 978	3 820	13 078	15.45
1979	1 081	980	8 965	4 467	15 295	15.60
1980	440	399	8 235	3 698	12 661	31.75
1981	471	427	9 787	3 974	13 606	31.85
1982	292	265	7 759	2 830	9 689	36.57
1983	426	387	10 560	3 635	12 446	32.19
1984	434	394	10 631	3 530	12 085	30.71
1985	399	362	9 904	3 159	10 817	29.89
1986 (R)	335	304	9 230	2 804	9 600	31.56
1987 (P)	359	326	10 106	2 952	10 106	31.00
TOTAL	18 606	16 880		58 257	199 461	

In Ontario, quartz is mined primarily from sandstone deposits. The main uses are as smelter flux, in glass manufacturing, foundry sands, chemicals and in cement and concrete products.

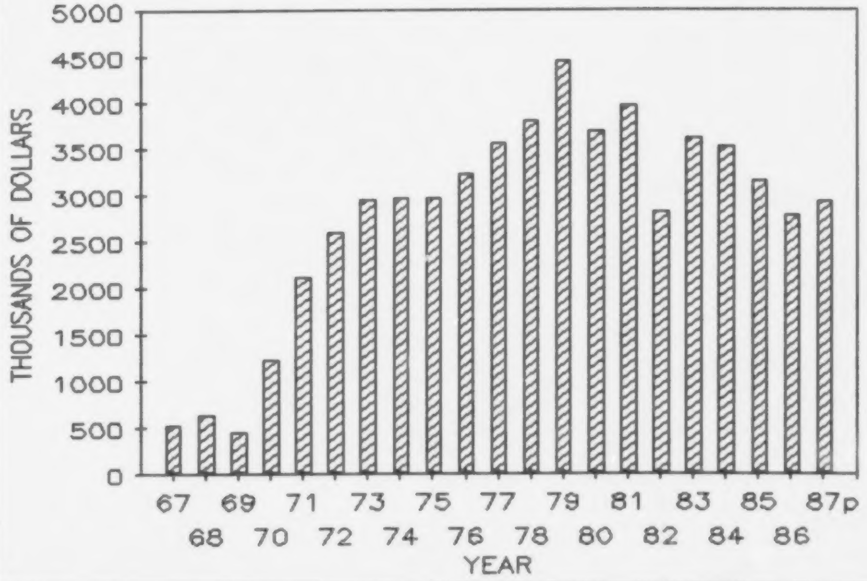
Ontario, with a large deposit on Badgeley Island in Georgian Bay, produces 40% of Canada's quartz as silica. In 1986, the only areas to experience an increase in consumption were the flat glass and fiberglass industries. This increase was directly related to the growth of the construction industry. Overall production in Canada and Ontario decreased by 8% and 16% respectively in 1986 over 1985. This decrease in output, which began in 1984, is attributed to the competition from plastics and aluminum in the container manufacturing industry. Output in 1987 is expected to rise by 7% in response to increased demand from the ferro-nickel industry.

In the above chart, production represents the tonnage of crude or pulverized quartz, quartzite and pure silica sand shipped for sale, by the producer. The value is taken as reported by the producer.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION



VOLUME OF PRODUCTION OF QUARTZ IN ONTARIO



VALUE OF PRODUCTION OF QUARTZ IN ONTARIO (IN 1971 CONSTANT $)

VOLUME AND VALUE OF PRODUCTION OF SALT IN ONTARIO

	VOLUME OF PRODUCTION IN 000'S		VALUE OF PRODUCTION IN 000'S			UNIT VALUE
YEAR	SHORT TONS	TONNE	CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	1987 DOLLARS/TONNE
1967	4 673	4 240	19 116	22 253	76 195	17.97
1968	4 144	3 759	21 606	24 358	83 403	22.19
1969	3 760	3 411	19 104	20 609	70 564	20.69
1970	4 158	3 772	22 700	23 450	80 294	21.29
1971	4 171	3 784	24 121	24 121	82 591	21.82
1972	4 038	3 663	24 481	23 338	79 909	21.82
1973	4 161	3 775	33 166	29 170	99 878	26.46
1974	4 456	4 043	40 170	31 043	106 291	26.29
1975	4 148	3 763	32 259	22 020	75 396	20.04
1976	4 948	4 489	52 493	32 726	112 055	24.96
1977	4 946	4 486	57 141	33 280	113 949	25.40
1978	5 363	4 865	61 679	33 760	115 594	23.76
1979	5 720	5 189	67 900	33 832	115 840	22.33
1980	5 369	4 871	71 401	32 061	109 778	22.54
1981	5 477	4 969	80 889	32 841	112 449	22.63
1982	6 020	5 461	93 200	33 990	116 381	21.31
1983	6 041	5 480	98 726	33 985	116 364	21.23
1984	7 068	6 412	131 720	43 732	149 738	23.35
1985	6 425	5 829	125 233	39 947	136 778	23.47
1986 (R)	6 879	6 240	147 686	44 862	153 608	24.61
1987 (P)	6 310	5 724	140 489	41 031	140 489	24.54
TOTAL	108 275	98 225		656 409	2 247 544	

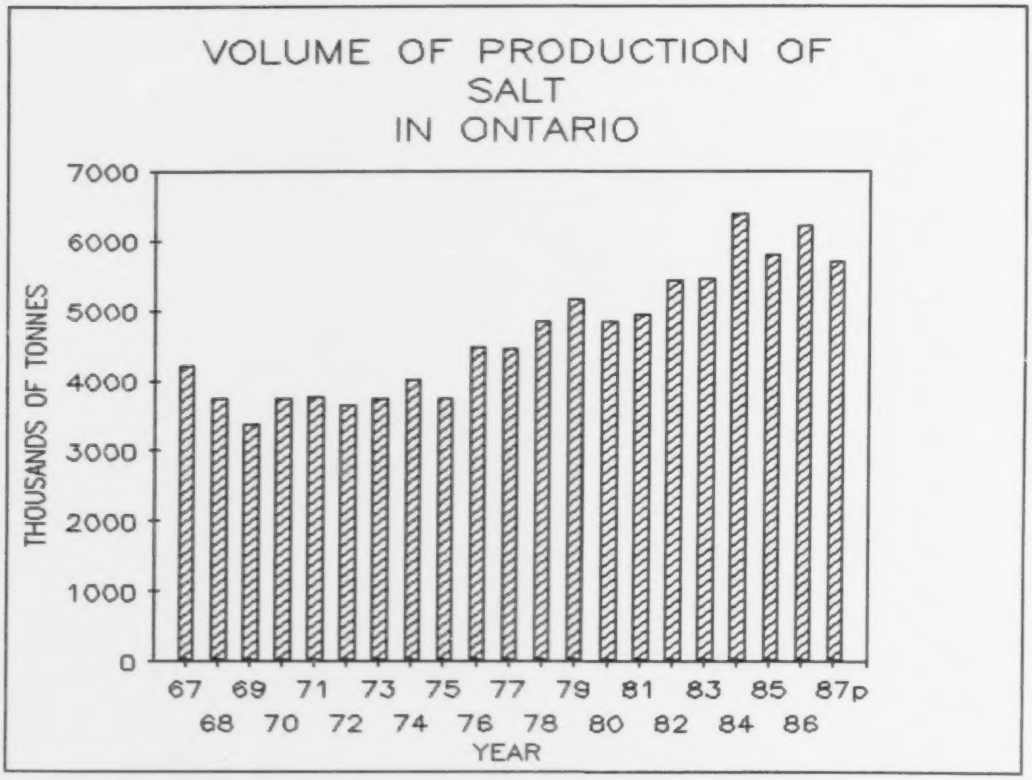
Salt is a widespread, low value bulk commodity. The thick salt beds of Southern Ontario are relatively flat-lying and undisturbed. In Ontario, salt is found in Goderich, Sarnia, Windsor and Amherstburg. The largest consumer of salt is the industrial chemical industry, which accounts for 47% of consumption. Snow and ice control accounts for another 45%, while the remaining is used in water treatment, food and fish industries.

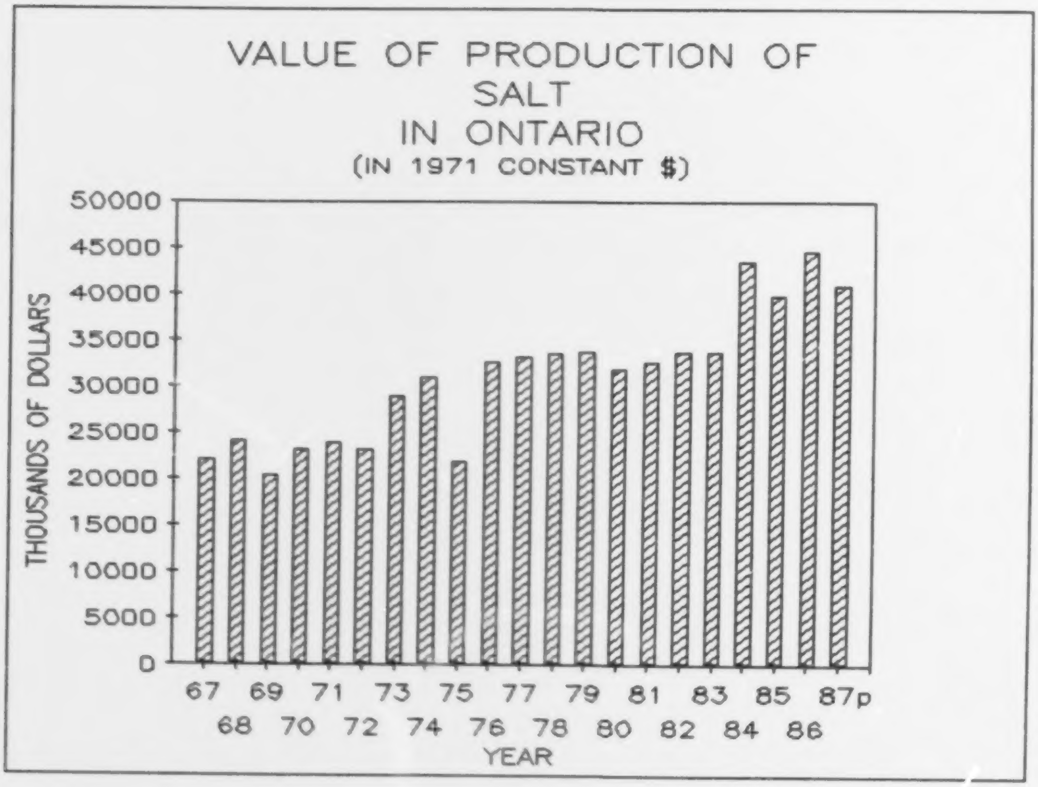
Although salt is cheap to extract it is expensive to transport. Therefore international trade in salt is small in terms of world production.

The strong growth of the industrial chemical sector, expected within the next decade, will have noticeable repercussions on salt production in Ontario.

In the above chart, production is taken as the tonnage of various grades of dry salt shipped by primary producers, plus salt content of brine used by producers for industrial (chemical) purposes. The value is that reported by producers.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION


VOLUME OF PRODUCTION OF SALT IN ONTARIO


VALUE OF PRODUCTION OF SALT IN ONTARIO (IN 1971 CONSTANT $)

VOLUME AND VALUE OF PRODUCTION OF SAND & GRAVEL IN ONTARIO

	VOLUME OF PRODUCTION IN 000'S		VALUE OF PRODUCTION IN 000'S			UNIT VALUE
YEAR	SHORT TONS	TONNE	CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	1987 DOLLARS/TONNE
1967	94 751	85 957	67 664	78 771	269 712	3.14
1968	84 096	76 290	55 095	62 114	212 677	2.79
1969	82 657	74 986	46 246	49 887	170 814	2.28
1970	82 877	75 185	54 419	56 218	192 490	2.56
1971	77 631	70 426	57 104	57 104	195 524	2.78
1972	76 380	69 291	64 320	61 316	209 944	3.03
1973	80 568	73 090	74 408	65 443	224 076	3.07
1974	79 985	72 561	85 518	66 088	226 286	3.12
1975	76 837	69 705	95 579	65 242	223 387	3.20
1976	75 841	68 802	106 093	66 143	226 474	3.29
1977	83 115	75 400	121 776	70 924	242 843	3.22
1978	96 833	87 846	142 743	78 130	267 517	3.05
1979	99 776	90 516	151 847	75 659	259 056	2.86
1980	85 518	77 596	133 980	60 162	205 993	2.65
1981	77 373	70 206	134 435	54 582	186 888	2.66
1982	59 048	53 568	116 552	42 506	145 541	2.72
1983	59 064	53 602	120 232	41 388	141 712	2.64
1984	63 294	57 446	136 125	45 194	154 745	2.69
1985	71 101	64 502	158 347	50 509	172 944	2.68
1986 (R)	94 280	85 512	248 185	75 390	258 137	3.02
1987 (P)	104 168	94 500	289 170	84 454	289 170	3.06
TOTAL	1 705 193	1 546 987		1 307 224	4 475 930	

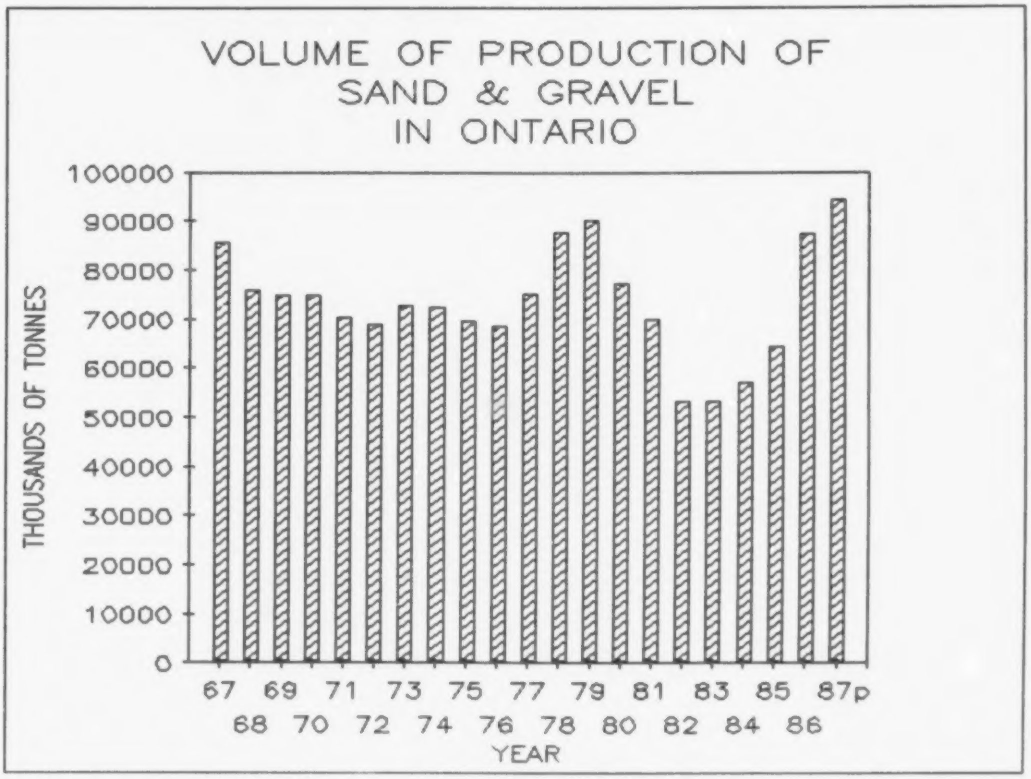
Ontario is the largest sand and gravel producer, accounting for over 30% of Canada's total output. Highway construction and concrete aggregate are the main uses. Other uses include landfill and winter road maintenance. Aggregate reserves in Ontario are large and widespread.

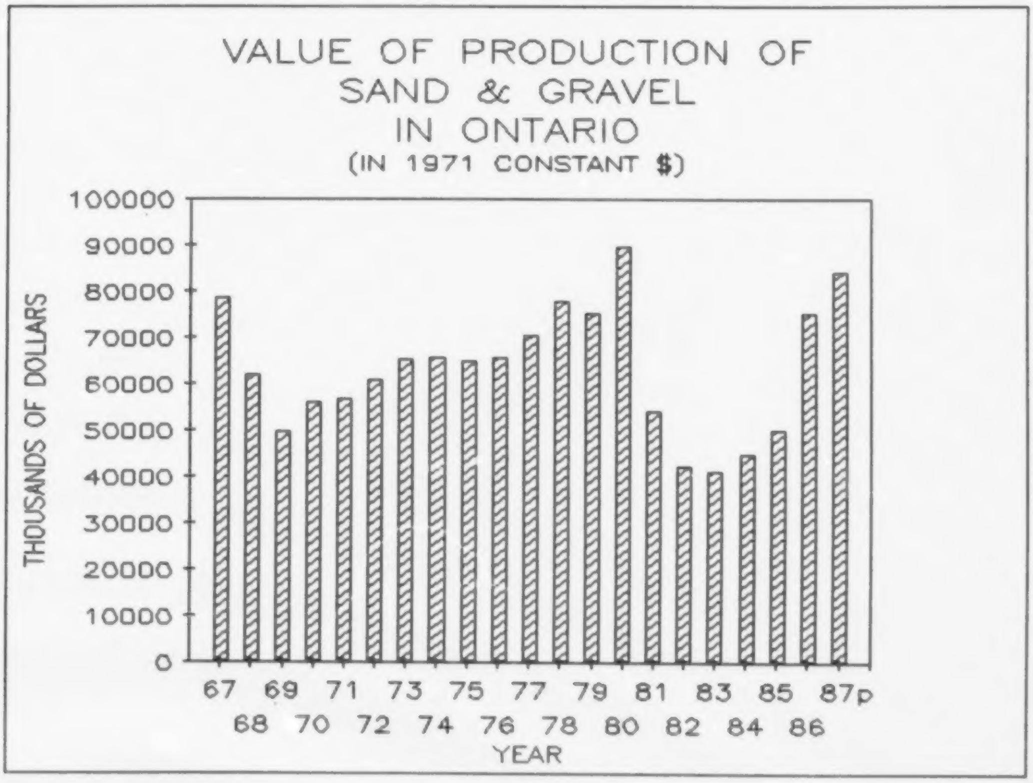
The continuing growth in urban expansion and construction projects have significantly increased the demand for sand and gravel. Since 1982, Ontario's aggregate production has been steadily increasing. Consumption should continue to rise with population growth, housing requirements and construction in general. The demand for aggregates in 1987 is estimated to increase by 10% over the previous year. Total production is expected to be in excess of 94 million tonnes.

Although resources are large, their geographic distribution, environmental restrictions and quality requirements sometimes make their exploitation uneconimic.

In the above chart, production represents shipments at the values reported by operators of sand and gravel pits or dredges.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION


VOLUME OF PRODUCTION OF
SAND & GRAVEL
IN ONTARIO
THOUSANDS OF TONNES
100000
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87p
YEAR


VALUE OF PRODUCTION OF
SAND & GRAVEL
IN ONTARIO
(IN 1971 CONSTANT $)
THOUSANDS OF DOLLARS
100000
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87p
YEAR

VOLUME AND VALUE OF PRODUCTION OF SELENIUM IN ONTARIO

YEAR	VOLUME OF PRODUCTION IN 000'S POUNDS	KG	VALUE OF PRODUCTION IN 000'S CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	UNIT VALUE 1987 DOLLARS/KG
1967	135	61	654	761	2 606	42.62
1968	128	58	618	697	2 387	41.27
1969	84	38	480	518	1 775	46.58
1970	132	60	1 131	1 168	4 000	67.06
1971	128	58	1 164	1 164	3 984	68.62
1972	109	49	969	924	3 164	64.12
1973	95	43	868	763	2 613	60.68
1974	129	58	2 024	1 564	5 355	91.88
1975	108	49	1 972	1 346	4 609	94.35
1976	108	49	1 924	1 200	4 107	83.53
1977	117	53	2 129	1 240	4 245	79.87
1978	69	31	1 187	650	2 225	70.69
1979	40	18	581	290	992	54.12
1980	95	43	1 069	480	1 643	38.14
1981	63	29	680	276	945	33.07
1982	55	25	274	100	342	13.66
1983	78	35	335	115	394	11.19
1984	120	55	1 106	367	1 258	23.04
1985	265	120	2 625	837	2 867	23.83
1986 (R)	361	164	2 391	726	2 487	15.19
1987 (P)	741	336	6 213	1 815	6 213	18.49
TOTAL	3 160	1 432		17 001	58 211	

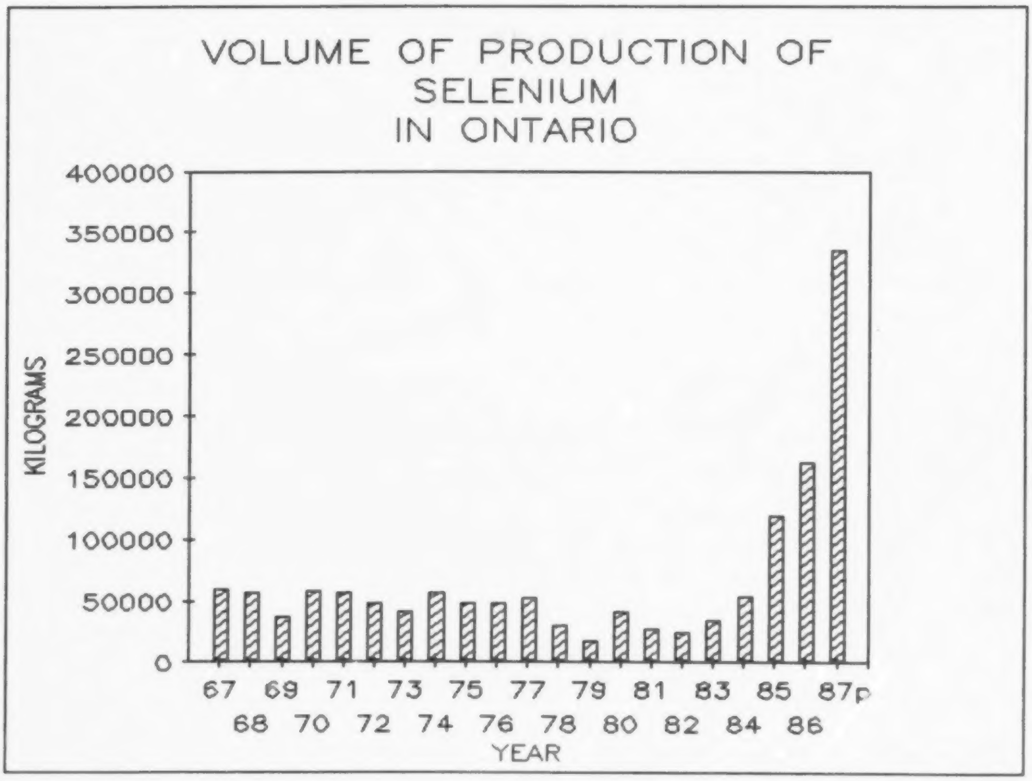
In Ontario, most selenium is recovered from electrolytic slimes in the refining of copper from Inco Limited and Falconbridge's Kidd Creek operations. In 1986, selenium production in the Province represented 48% of Canada's total selenium output. Canada ranks second after Japan in world refinery production of selenium. The metal is refined in Canada from both primary (slimes) and secondary (xerographic scrap) sources.

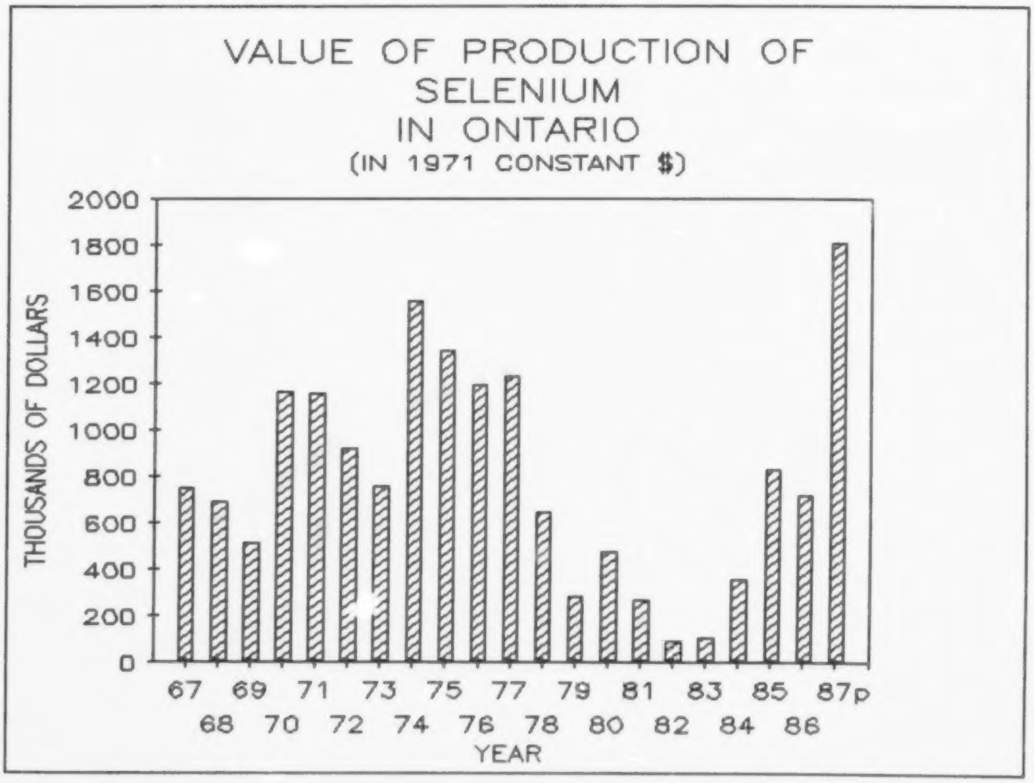
Selenium is important in the production of electronic and photocopier components, glass manufacturing, chemicals and pigments.

Selenium production in Ontario has increased substantially since 1985 with increases of 36% in 1986 and an estimated increase of 105% in 1987. Selenium production depends upon future operating rates at copper refineries.

In the chart above, the value is based on the average yearly industry price x volume.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION


VOLUME OF PRODUCTION OF
SELENIUM
IN ONTARIO
KILOGRAMS
400000
350000
300000
250000
200000
150000
100000
50000
0
67 69 71 73 75 77 79 81 83 85 87p
68 70 72 74 76 78 80 82 84 86
YEAR


VALUE OF PRODUCTION OF
SELENIUM
IN ONTARIO
(IN 1971 CONSTANT $)
THOUSANDS OF DOLLARS
2000
1800
1600
1400
1200
1000
800
600
400
200
0
67 69 71 73 75 77 79 81 83 85 87p
68 70 72 74 76 78 80 82 84 86
YEAR

VOLUME AND VALUE OF PRODUCTION OF SILVER IN ONTARIO

	VOLUME OF PRODUCTION IN 000'S		VALUE OF PRODUCTION IN 000'S			UNIT VALUE
YEAR	TROY OUNCES	KG	CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	1987 DOLLARS/KG
1967	14 309	445	24 784	28 852	98 789	221.96
1968	21 845	679	50 527	56 963	195 043	287.06
1969	22 260	692	42 963	46 346	158 688	229.19
1970	19 876	618	36 771	37 987	130 067	210.39
1971	18 682	581	29 143	29 143	99 787	171.73
1972	19 588	609	32 711	31 183	106 772	175.25
1973	19 617	610	49 554	43 583	149 227	244.57
1974	17 852	555	82 639	63 863	218 667	393.80
1975	14 908	464	67 176	45 854	157 004	338.59
1976	16 317	508	70 131	43 723	149 707	294.98
1977	16 857	524	82 938	48 304	165 392	315.44
1978	14 287	444	88 162	48 255	165 226	371.83
1979	13 244	412	171 833	85 617	293 152	711.63
1980	14 822	461	335 566	150 681	515 931	1119.09
1981	10 570	329	136 969	55 611	190 411	579.15
1982	11 155	347	118 680	43 282	148 199	427.12
1983	13 333	415	197 917	68 130	233 276	562.52
1984	16 607	517	163 233	54 194	185 561	359.25
1985	13 828	430	116 942	37 302	127 723	296.97
1986 (R)	11 624	362	91 203	27 704	94 860	262.38
1987 (P)	10 803	336	100 457	29 339	100 457	298.98
TOTAL	332 384	10 338		1 075 916	3 683 939	

In Ontario, about 89% of the silver production is recovered as a by-product from base metal mines. The remainder is produced from silver mines in the Cobalt camp and gold mines throughout the Province. Ontario produces about 30% of Canada's silver. It has, however, been declining since 1984. The decrease in production from 1985 to 1987 is attributed to cutbacks, to lower silver grades and to the fire that destroyed a mill in Cobalt in early 1986, which has been replaced by a new mill.

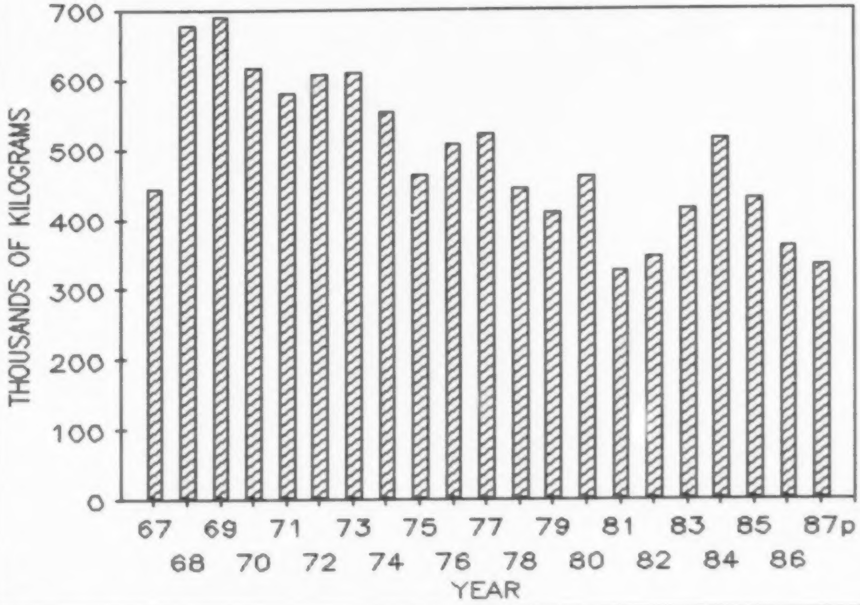
Silver is used mainly in photography, electrical products, jewellery and silverware.

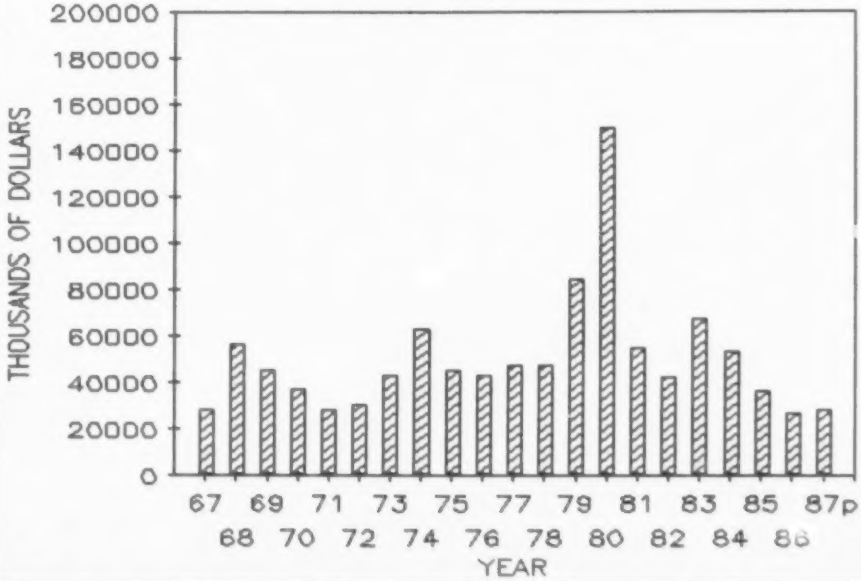
Silver supply from mine production and secondary sources is expected to remain fairly constant in the near future as world industrial demand increases gradually. The current global oversupply of silver is being absorbed by the investment sector.

Silver production in the chart above includes:
(a) Silver in crude bullion obtained direct from lode gold mines.
(b) Silver in blister copper made at copper smelters.
(c) Silver in base bullion made at lead refineries.
(d) Silver in all types of ores shipped for export.
(e) Silver in nickel-copper matte shipped for export.
(f) Silver in platinum-palladium concentrates shipped for export.

Total silver, as compound from above, is valued at the average yearly industry price x volume.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION


VOLUME OF PRODUCTION OF SILVER IN ONTARIO


VALUE OF PRODUCTION OF SILVER IN ONTARIO (IN 1971 CONSTANT $)

VOLUME AND VALUE OF PRODUCTION OF SOAPSTONE,TALC IN ONTARIO

YEAR	VOLUME OF PRODUCTION IN 000'S		VALUE OF PRODUCTION IN 000'S			UNIT VALUE
	SHORT TONS	TONNE	CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	1987 DOLLARS/TONNE
1967	14	13	229	266	911	72.65
1968	20	18	299	337	1 154	62.82
1969	20	18	315	340	1 165	63.35
1970	19	17	335	346	1 185	68.33
1971	19	18	353	353	1 207	68.52
1972	21	19	418	398	1 363	72.01
1973	25	23	551	484	1 659	73.72
1974	29	26	723	559	1 913	73.68
1975	23	21	624	426	1 459	69.90
1976	20	19	587	366	1 253	67.41
1977	16	14	660	385	1 317	93.31
1978	9	8	440	241	825	98.40
1979	13	12	914	456	1 560	128.40
1980	18	16	1 698	762	2 610	159.99
1981	20	18	2 592	1 052	3 603	197.64
1982	23	20	3 434	1 252	4 288	209.55
1983	36	33	6 060	2 086	7 143	217.26
1984	47	43	8 505	2 824	9 669	225.84
1985	52	48	9 624	3 070	10 511	220.93
1986 (R)	61	55	10 524	3 197	10 946	199.08
1987 (P)	N/A	N/A	11 476	3 352	11 476	.00
TOTAL	505	459		22 552	77 217	

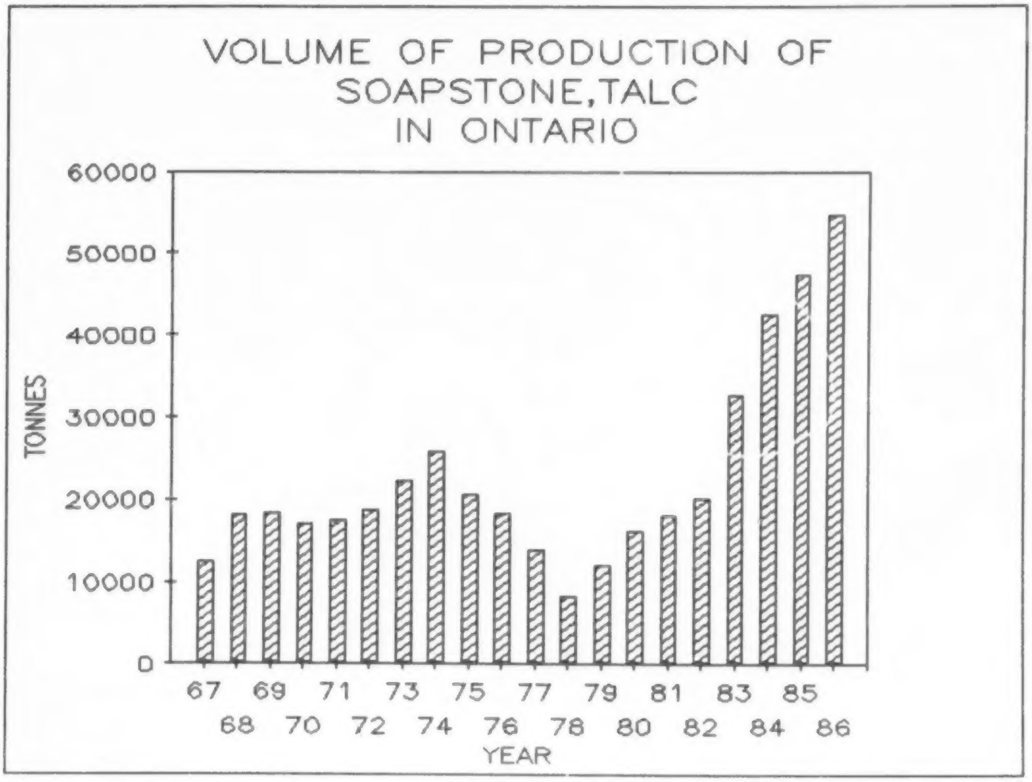
Talc is used mainly as a paper filler. It is also used in ceramics, plastics, paints and pharmaceutical products.

In Ontario, talc is produced in the Madoc area from hydrothermal replacements in dolomite, and south of Timmins from a talc-magnesite deposit. In 1986, Ontario produced 45% of Canada's total soapstone and talc output. Canada, along with Italy and Austria, is the twelfth largest producer in the world.

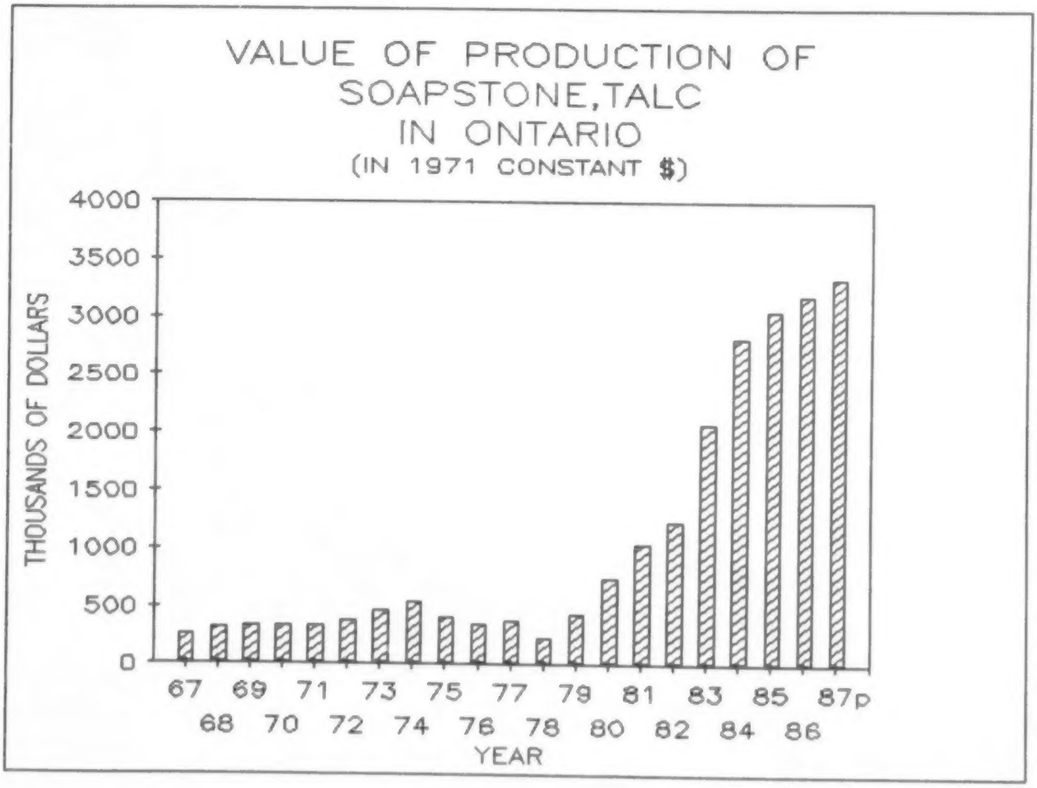
Because talc deposits are widespread throughout the world, it has limited international trade. Nearly 30 countries produce talc and future supplies are expected to meet any growth in world demand. Growing markets for talc are in the plastics, paper, insecticide, roofing and rubber products.

In the chart above, production represents the tonnage of any crude talc shipped, plus any milled or refined talc shipped from mills operated in conjunction with the mines. The value is taken as reported by the mine and mill operators.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION



VOLUME OF PRODUCTION OF SOAPSTONE, TALC IN ONTARIO



VALUE OF PRODUCTION OF SOAPSTONE, TALC IN ONTARIO (IN 1971 CONSTANT $)

VOLUME AND VALUE OF PRODUCTION OF STONE IN ONTARIO

YEAR	VOLUME OF PRODUCTION IN 000'S SHORT TONS	TONNE	VALUE OF PRODUCTION IN 000'S CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	UNIT VALUE 1987 DOLLARS/TONNE
1967	25 745	23 355	32 522	37 861	129 635	5.55
1968	28 636	25 978	37 734	42 541	145 660	5.61
1969	27 035	24 525	32 294	34 837	119 281	4.86
1970	27 673	25 105	34 447	35 586	121 846	4.85
1971	28 238	25 618	38 484	38 484	131 768	5.14
1972	31 091	28 206	41 231	39 305	134 579	4.77
1973	35 539	32 241	52 870	46 499	159 214	4.94
1974	34 460	31 261	60 916	47 076	161 188	5.16
1975	30 342	27 526	62 250	42 491	145 490	5.29
1976	31 047	28 165	71 861	44 801	153 398	5.45
1977	31 823	28 869	77 884	45 361	155 315	5.38
1978	42 041	38 139	101 623	55 623	190 452	4.99
1979	43 906	39 831	113 478	56 541	193 597	4.86
1980	39 690	36 304	123 388	55 405	189 708	5.23
1981	41 388	37 546	126 906	51 525	176 421	4.70
1982	31 372	28 460	110 785	40 403	138 340	4.86
1983	37 293	33 832	143 479	49 390	169 113	5.00
1984	45 621	41 387	179 480	59 588	204 030	4.93
1985	50 546	45 854	211 666	67 517	231 179	5.04
1986 (R)	58 905	53 438	243 398	73 936	253 157	4.74
1987 (P)	66 056	59 925	280 711	81 983	280 711	4.68
TOTAL	788 447	715 565		1 046 753	3 584 082	

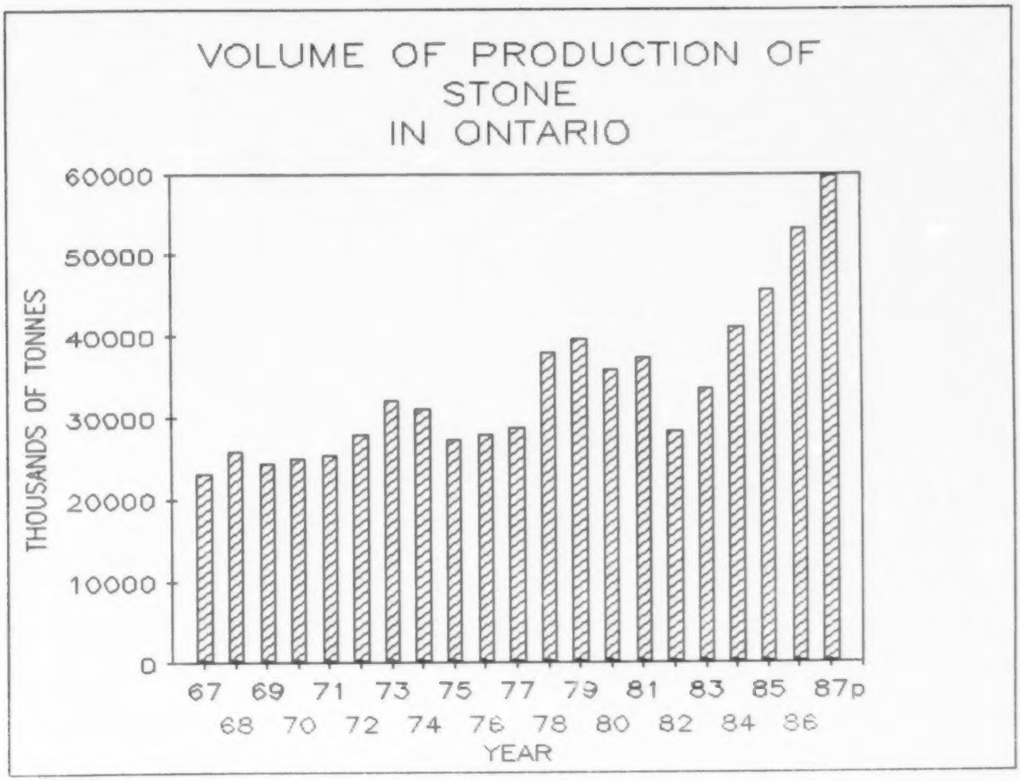
Stone is non-renewable resource which is produced in direct response to the demands of the construction industry. 95% of Ontario's stone production is utilized as crushed stone for concrete, asphalt, riprap and highway construction. The building stone industry accounts for approximately 1% of Ontario's output.

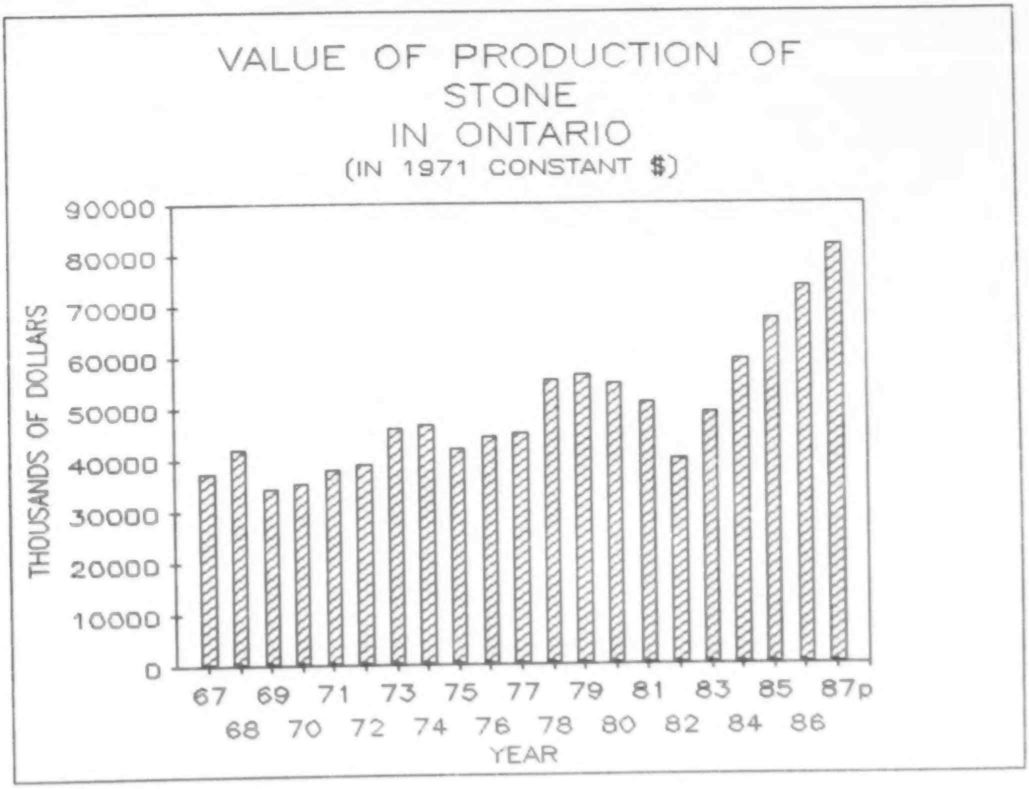
Limestone, which can be used for building stone and crushed aggregate is also used in chemicals, pharmaceuticals, disinfectants, the treatment of water and as a soil conditioner. Granite, marble and sandstone are used primarily as building and monument stone.

Ontario, which accounts for over 40% of Canada's total stone production experienced a 16% increase in output from 1985 to 1986. As the construction industry in the Province continues to expand, growth in stone production for 1987 should follow the trend of the previous year.

In the above chart, production represents quarry shipments of crude or undressed stone, crushed stone, and dressed stone, if the latter is prepared by the quarry operators. Values are as reported by the operators.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION


VOLUME OF PRODUCTION OF
STONE
IN ONTARIO
THOUSANDS OF TONNES
60000
50000
40000
30000
20000
10000
0
67 69 71 73 75 77 79 81 83 85 87p
68 70 72 74 76 78 80 82 84 86
YEAR


VALUE OF PRODUCTION OF
STONE
IN ONTARIO
(IN 1971 CONSTANT $)
THOUSANDS OF DOLLARS
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
67 69 71 73 75 77 79 81 83 85 87p
68 70 72 74 76 78 80 82 84 86
YEAR

VOLUME AND VALUE OF PRODUCTION OF SULPHUR IN ONTARIO

	VOLUME OF PRODUCTION IN 000'S		VALUE OF PRODUCTION IN 000'S			UNIT VALUE
YEAR	SHORT TONS	TONNE	CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	1987 DOLLARS/TONNE
1967	234	213	2 354	2 740	9 383	44.12
1968	309	281	4 676	5 272	18 051	64.32
1969	253	230	3 393	3 660	12 533	54.59
1970	331	301	3 097	3 200	10 956	36.45
1971	373	338	3 406	3 406	11 663	34.50
1972	391	355	3 448	3 287	11 256	31.73
1973	405	368	5 437	4 782	16 374	44.55
1974	422	383	5 662	4 376	14 982	39.14
1975	379	343	4 770	3 256	11 149	32.46
1976	402	364	9 597	5 983	20 487	56.23
1977	416	378	7 935	4 621	15 823	41.88
1978	331	300	5 135	2 811	9 624	32.07
1979	371	336	6 894	3 435	11 762	34.98
1980	597	542	13 441	6 035	20 665	38.15
1981	493	447	18 578	7 543	25 827	57.80
1982	344	312	17 588	6 414	21 963	70.46
1983	373	339	19 710	6 785	23 232	68.58
1984	491	446	35 591	11 816	40 459	90.82
1985	496	450	38 257	12 203	41 783	92.85
1986 (R)	508	461	30 862	9 375	32 099	69.59
1987 (P)	549	498	50 145	14 645	50 145	100.69
TOTAL	8 468	7 685		125 645	430 216	

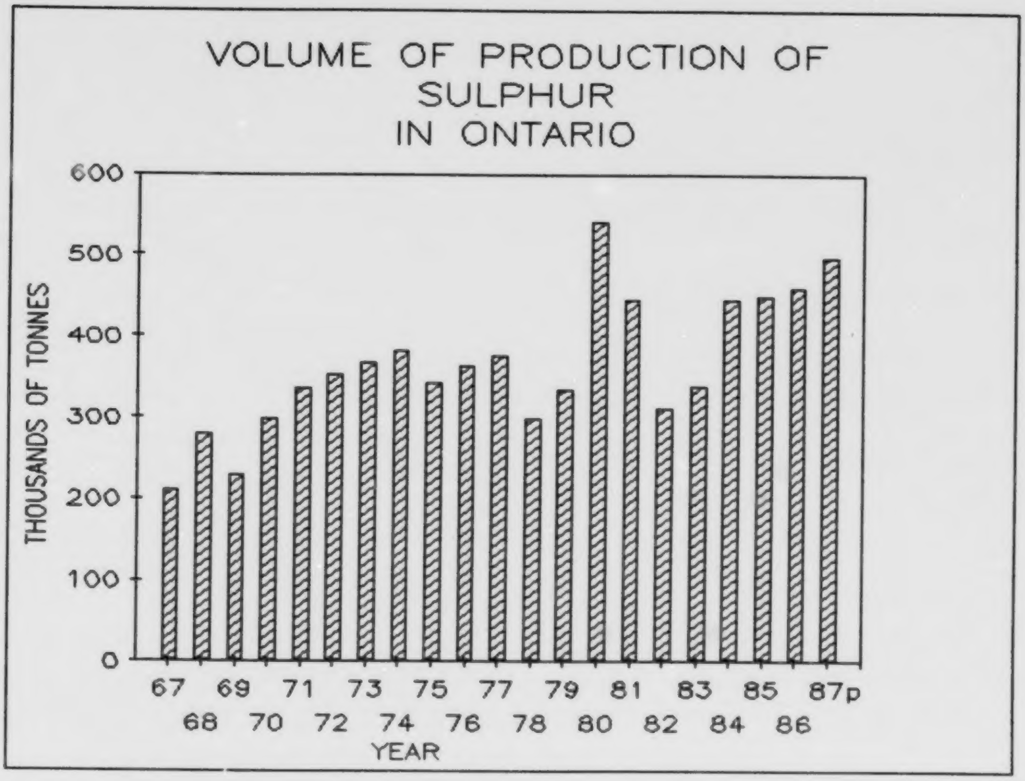
Sulphur is recovered as sulphuric acid from base metal smelting and as elemental sulphur and sulphuric dioxide from sour gas operations. Over 50% of sulphur consumption is used in the production of fertilizer. It is also used in pharmaceuticals, explosives, petroleum catalysts and paints.

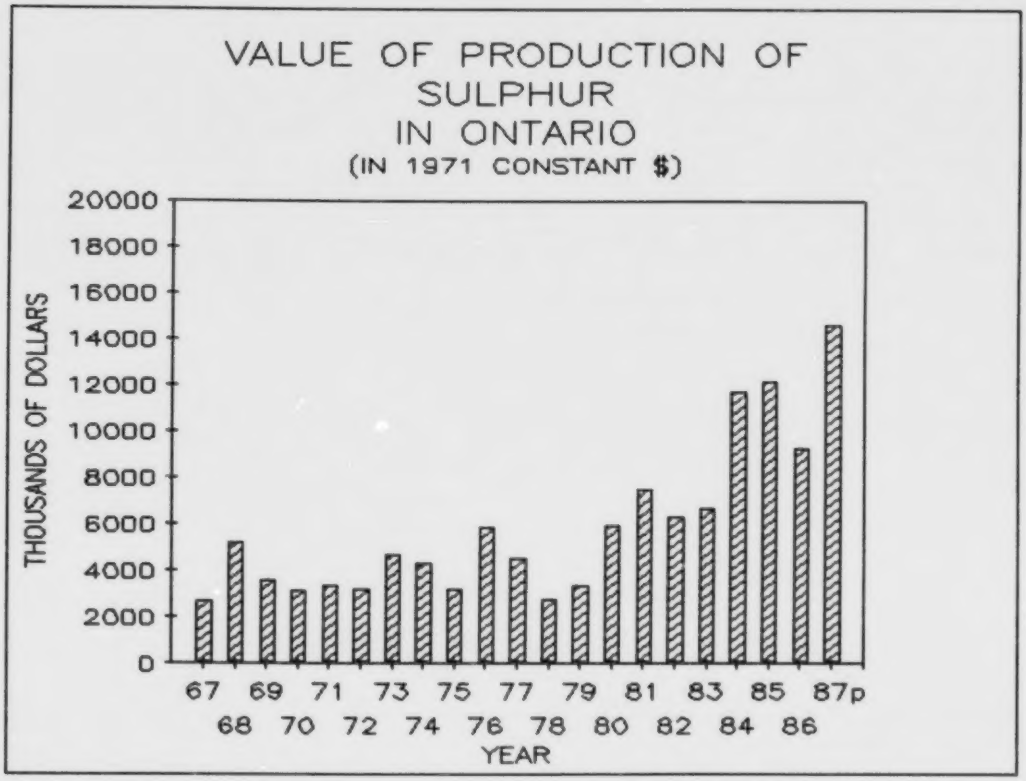
Sulphur production in Ontario as a percentage of Canada's sulphur output has remained constant for the past five years. In 1986, it represented about 6% of Canada's total sulphur production.

The world supply-demand situation was in approximate balance in 1985 and 1986. In 1987, world consumption is expected to exceed production. Consequently, a drop in sulphur inventories is anticipated in Canada.

In the chart above, production represents sulphur in smelter gas - prior to final metal recovery sulphide concentrates are smelted or roasted and the resultant gases may be used to produce a marketable sulphur dioxide or sulphuric acid. Production is considered as the sulphur dioxide marketed. This sulphur is valued at the average price for sulphur in pyrite concentrates. In 1986, there was some production of elemental sulphur from oil refineries in Ontario.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION


VOLUME OF PRODUCTION OF SULPHUR IN ONTARIO
THOUSANDS OF TONNES
600
500
400
300
200
100
0
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87p
YEAR


VALUE OF PRODUCTION OF SULPHUR IN ONTARIO
(IN 1971 CONSTANT $)
THOUSANDS OF DOLLARS
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87p
YEAR

VOLUME AND VALUE OF PRODUCTION OF TELLURIUM IN ONTARIO

	VOLUME OF PRODUCTION IN 000'S		VALUE OF PRODUCTION IN 000'S			UNIT VALUE
YEAR	POUNDS	KG	CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	1987 DOLLARS/KG
1967	7	3	42	49	168	57.13
1968	7	3	43	48	165	54.99
1969	6	3	36	39	134	52.62
1970	7	3	46	47	162	48.90
1971	8	4	49	49	168	45.75
1972	8	4	49	47	161	42.74
1973	15	7	93	82	281	40.30
1974	19	9	158	122	418	47.37
1975	15	7	145	99	338	48.75
1976	16	7	158	98	337	47.96
1977	18	8	325	189	649	80.36
1978	12	5	267	146	500	94.26
1979	7	3	162	81	276	88.15
1980	11	5	247	111	379	77.27
1981	10	4	160	65	222	49.91
1982	6	3	94	34	117	41.21
1983	3	1	35	12	41	32.29
1984	12	6	149	49	169	30.64
1985	11	5	159	51	174	36.17
1986 (R)	23	10	355	108	369	35.84
1987 (P)	18	8	234	68	234	29.25
TOTAL	239	108		1 594	5 462	

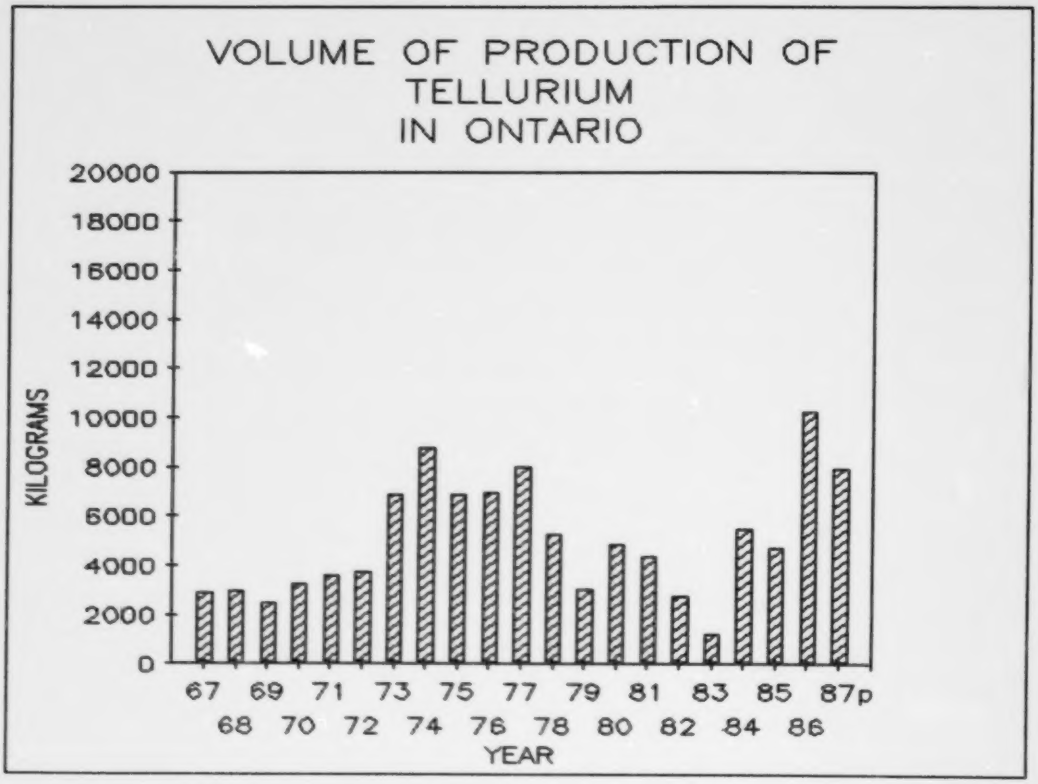
Tellurium is produced as a by-product from electrolytic copper refineries. Its primary use is as an additive in ferrous and non-ferrous alloys to improve their machineability and metallurgical properties. As well, it is used as an accelerator in rubber compounding, a semi-conductor in thermoelectric, thermal imaging and photoelectric applications and in the manufacture of pigments, germicides and delay blasting caps.

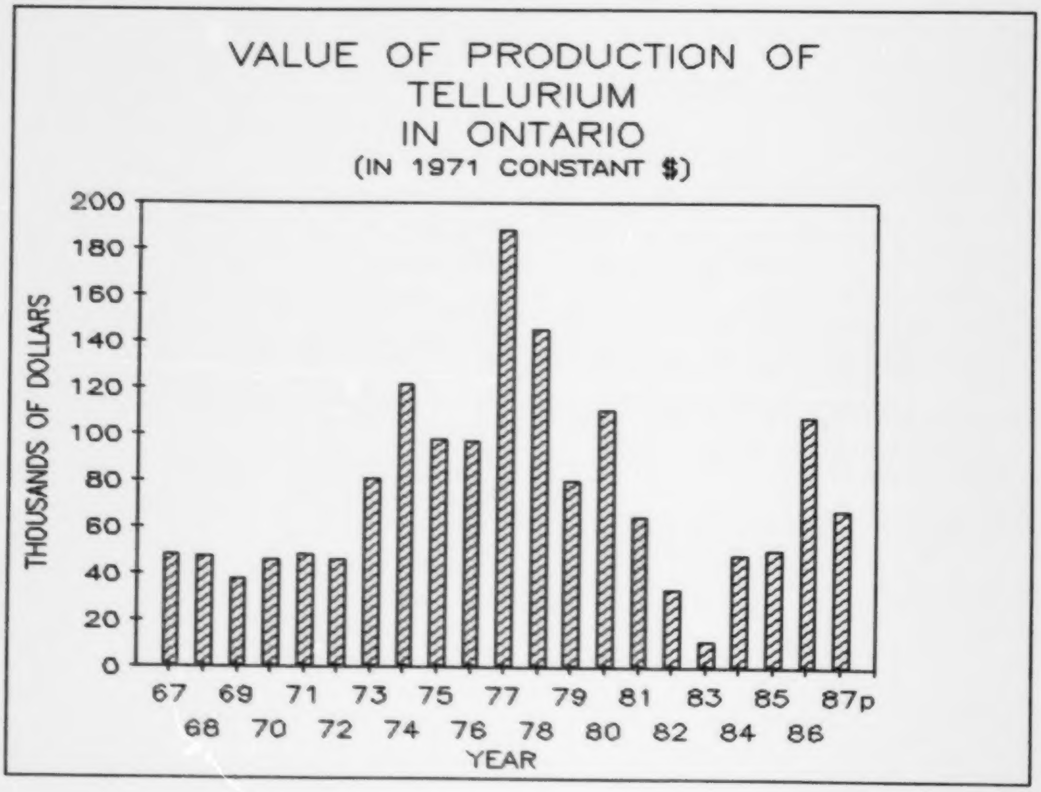
In Ontario, tellurium is produced at Copper Cliff. While total output in Canada has steadily increased, production in Ontario has fluctuated throughout the 80's, jumping by 114% from 1985 to 1986. This increase is due to an improvement in market conditions and a growing demand for tellurium in ferroalloy applications.

Although present prices do not justify increasing recovery rates, the advent of new applications such as solar collectors and telluride in photovoltaic cells should increase demand.

In the above chart, value is based on the average yearly industry price x volume.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION


VOLUME OF PRODUCTION OF TELLURIUM IN ONTARIO
KILOGRAMS
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
67 69 71 73 75 77 79 81 83 85 87p
68 70 72 74 76 78 80 82 84 86
YEAR


VALUE OF PRODUCTION OF TELLURIUM IN ONTARIO
(IN 1971 CONSTANT $)
THOUSANDS OF DOLLARS
200
180
160
140
120
100
80
60
40
20
0
67 69 71 73 75 77 79 81 83 85 87p
68 70 72 74 76 78 80 82 84 86
YEAR

VOLUME AND VALUE OF PRODUCTION OF URANIUM (U)
IN ONTARIO

	VOLUME OF PRODUCTION IN 000'S		VALUE OF PRODUCTION IN 000'S			UNIT VALUE
YEAR	POUNDS	KG	CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	1987 DOLLARS/KG
1967	4 622	2 097	41 418	48 217	165 094	78.74
1968	4 547	2 062	39 164	44 153	151 180	73.31
1969	6 140	2 785	40 307	43 482	148 881	53.46
1970	5 662	2 568	44 946	46 432	158 983	61.90
1971	5 945	2 696	44 627	44 627	152 803	56.67
1972	7 147	3 242	60 827	57 986	198 545	61.24
1973	6 881	3 121	65 209	57 351	196 371	62.91
1974	7 160	3 248	91 266	70 530	241 496	74.36
1975	8 963	4 066	164 150	112 048	383 651	94.36
1976	8 302	3 766	186 439	116 234	397 984	105.68
1977	7 998	3 628	250 689	146 004	499 917	137.79
1978	9 821	4 455	363 840	199 146	681 876	153.06
1979	8 830	4 005	375 793	187 241	641 114	160.06
1980	9 764	4 429	464 100	208 397	713 551	161.11
1981	10 713	4 859	522 012	211 942	725 688	149.33
1982	10 958	4 970	586 623	213 940	732 530	147.38
1983	10 510	4 767	535 770	184 430	631 490	132.47
1984	10 036	4 552	544 778	180 869	619 297	136.04
1985	9 920	4 499	552 561	176 256	603 499	134.13
1986 (R)	10 476	4 752	566 134	171 973	588 834	123.91
1987 (P)	9 621	4 364	509 235	148 725	509 235	116.69
TOTAL	174 016	78 931		2 669 983	9 142 019	

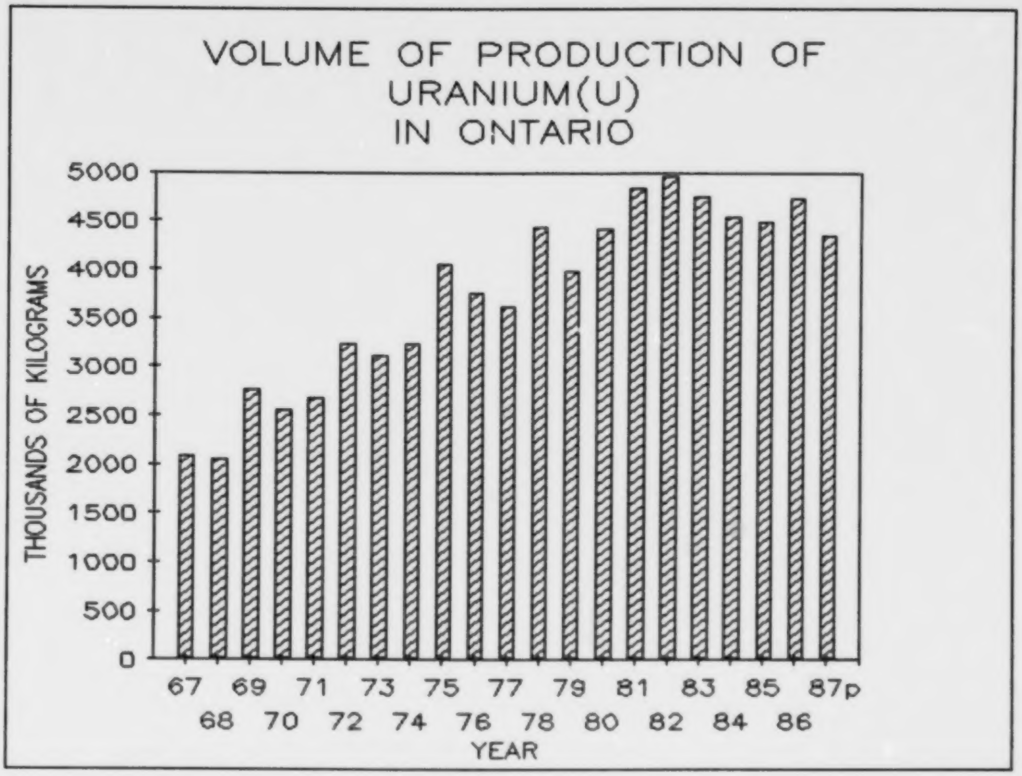
Uranium is used mainly in the nuclear generation of electricity. Some 46% of the total electrical energy generated by Ontario Hydro during 1986 came from nuclear plants.

Canada is the world's largest producer and exporter of uranium. Ontario mines, located in the Elliot Lake area, produced approximately 4.8 million kilograms or 41% of Canada's total uranium in 1986. Ontario's share of total Canadian uranium production has decreased since 1984 as more uranium mines in Saskatchewan have come into production. Ontario's production has remained fairly constant in the past several years.

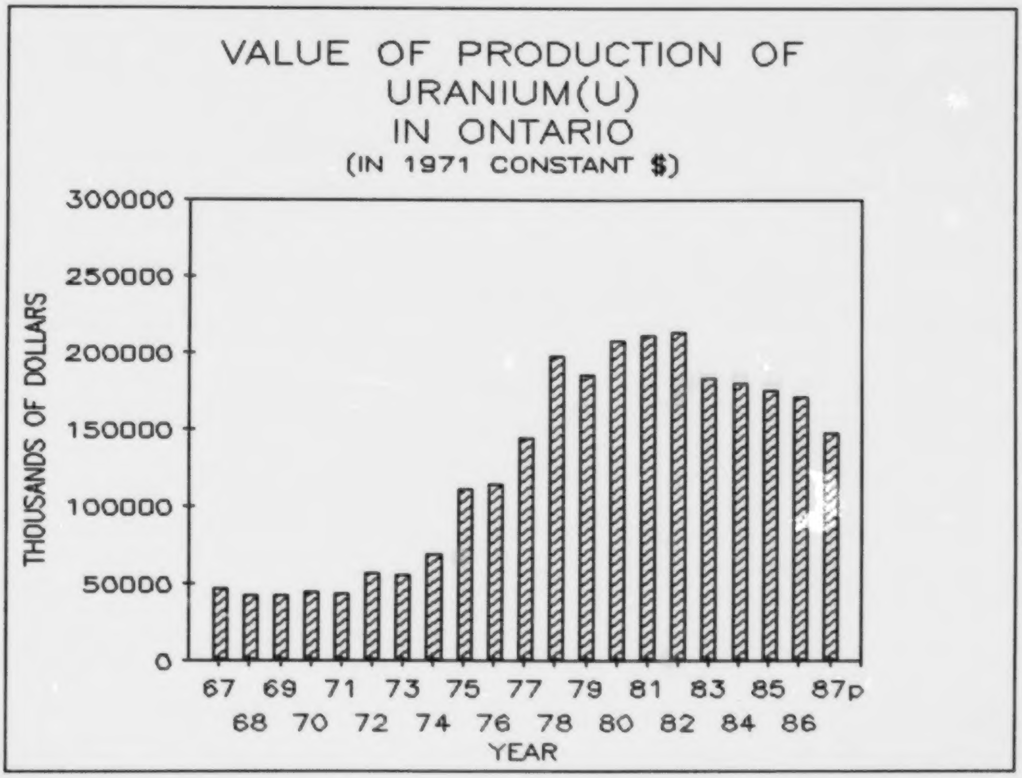
In 1986, world uranium production and consumer inventories met world reactor requirements. World demand is expected to increase steadily until the year 2 000. This is supported by the fact that in 1986, Canada approved more than 30 new contracts. Canada exports over 45% of its uranium to the U.S. and future demand for this metal will depend upon access to that market.

In the chart above, production consists of the uranium content of precipitates shipped with values as reported by the producers.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION



VOLUME OF PRODUCTION OF URANIUM(U) IN ONTARIO



VALUE OF PRODUCTION OF URANIUM(U) IN ONTARIO (IN 1971 CONSTANT $)

VOLUME AND VALUE OF PRODUCTION OF ZINC IN ONTARIO

YEAR	VOLUME OF PRODUCTION IN 000'S POUNDS	KG	VALUE OF PRODUCTION IN 000'S CURRENT DOLLARS	1971 DOLLARS	1987 DOLLARS	UNIT VALUE 1987 DOLLARS/KG
1967	537 065	243 609	77 821	90 595	310 196	1.27
1968	693 515	314 573	97 786	110 243	377 472	1.20
1969	720 572	326 846	109 743	118 385	405 351	1.24
1970	680 484	308 662	108 401	111 985	383 435	1.24
1971	731 451	331 780	122 372	122 372	419 001	1.26
1972	807 220	366 149	153 945	146 754	502 485	1.37
1973	912 729	414 007	220 388	193 833	663 683	1.60
1974	960 117	435 502	335 081	258 950	886 644	2.04
1975	740 428	335 852	277 660	189 529	648 949	1.93
1976	699 293	317 194	263 102	164 029	561 634	1.77
1977	651 289	295 420	231 409	134 775	461 471	1.56
1978	611 697	277 461	212 608	116 370	398 450	1.44
1979	637 924	289 357	278 881	138 954	475 779	1.64
1980	558 495	253 329	242 807	109 029	373 314	1.47
1981	542 405	246 031	286 284	116 234	397 984	1.62
1982	574 400	260 544	257 888	94 051	322 031	1.24
1983	605 871	274 819	280 506	96 560	330 620	1.20
1984	648 447	294 131	395 602	131 342	449 715	1.53
1985	588 498	266 938	301 001	96 013	328 748	1.23
1986 (R)	629 314	285 452	346 824	105 354	360 731	1.26
1987 (P)	712 219	323 057	411 574	120 203	411 574	1.27
TOTAL	14 243 433	6 460 713		2 765 560	9 469 267	

Canada is the world's largest producer and exporter of zinc producing about 25% of the Western World's output. Ontario was the largest Canadian producer of this metal in 1986, accounting for 28% of national zinc production. Responding to higher zinc prices and demand, production of zinc in Ontario has increased since 1985.

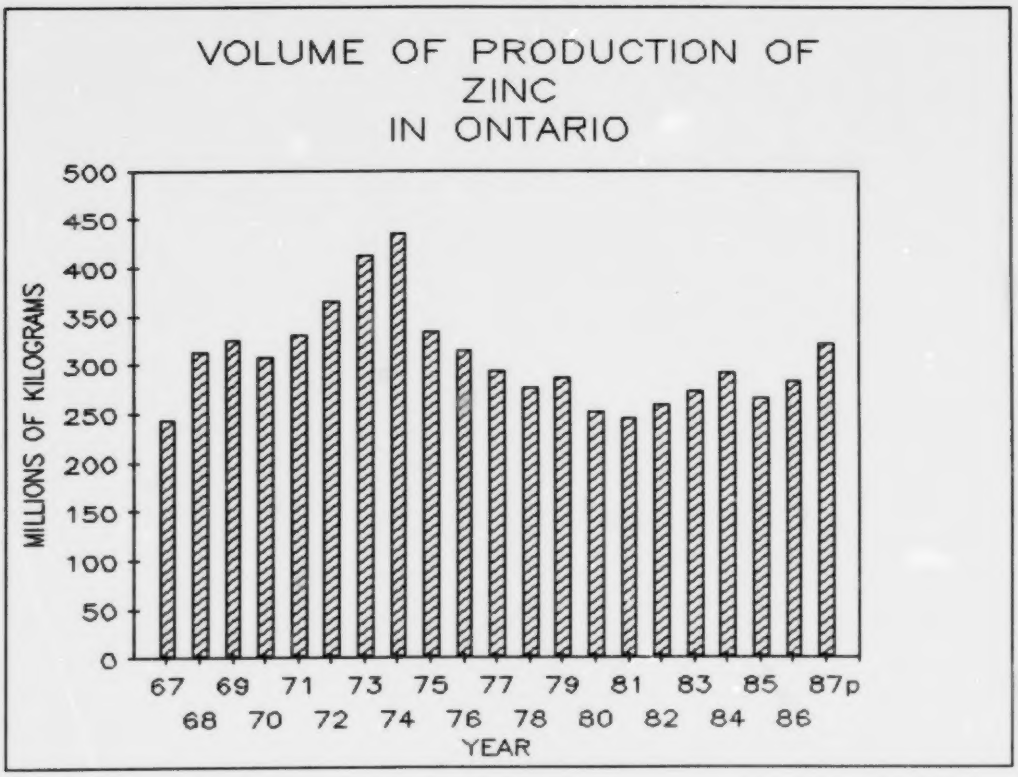
Approximately 40% of zinc consumption is used in galvanizing steel products. The remainder is used in batteries, diecast products, and other metal products.

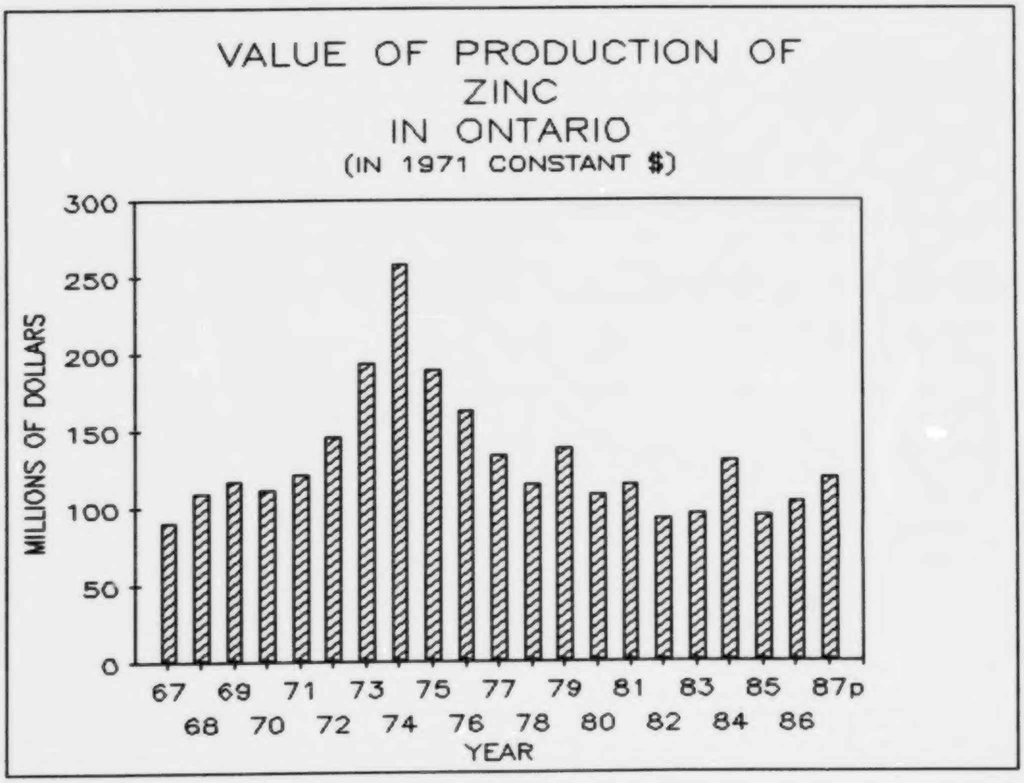
In 1988, world zinc supply is expected to exceed demand. The demand for zinc in galvanizing products is expected to be maintained or steadily increase in the near future.

In the chart above, production includes:
(a) Refined zinc from Kidd Creek Mines Ltd., Timmins, Ontario.
(b) Recoverable zinc (metal paid for) in concentrates shipped for export or shipped to the following domestic smelters: Canadian Electrolytic Zinc Ltd., Valleyfield, Quebec; Cominco Ltd., Trail, B.C. and Hudson Bay Mining and Smelting, Flin Flon, Manitoba.

Value is based on settlement value as reported or when settlement value is not available it is based on the average yearly industry price x volume.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION


VOLUME OF PRODUCTION OF ZINC IN ONTARIO


VALUE OF PRODUCTION OF ZINC IN ONTARIO (IN 1971 CONSTANT $)

VOLUME AND VALUE OF MINERAL PRODUCTION IN ONTARIO, IN CANADA, AND THE WORLD

VOLUME AND VALUE OF MINERAL PRODUCTION IN 1987

IN ONTARIO, CANADA AND THE WORLD

MINERAL COMMODITY	UNIT OF VOLUME	ONTARIO VOLUME IN 000'S	ONTARIO $ VALUE IN 000'S	CANADA VOLUME IN 000'S	CANADA $ VALUE IN 000'S	WORLD VOLUME IN 000'S	ONTARIO VOLUME AS % OF WORLD VOLUME	CANADA VOLUME AS % OF WORLD VOLUME
ANTIMONY	KG	0	0	3 575	13 158	N/A	N/A	N/A
ASBESTOS	TONNE	0	0	665	235 168	N/A	N/A	N/A
BARITE	TONNE	N/A	1 400	41	3 886	N/A	N/A	N/A
BISMUTH	KG	N/A	3	178	1 891	N/A	N/A	N/A
CADMIUM	KG	1 512	8 602	2 294	13 050	N/A	N/A	N/A
CEMENT	TONNE	5 201	413 671	12 205	976 025	N/A	N/A	N/A
CLAY PRODUCTS	N/A	N/A	130 866	N/A	210 208	N/A	N/A	N/A
COAL	TONNE	0	0	59 790	1 635 000	N/A	N/A	N/A
COBALT	KG	2 484	47 034	2 877	54 466	N/A	N/A	N/A
COPPER	KG	280 634	674 643	767 299	1 844 588	N/A	N/A	N/A
GEMSTONES	KG	N/A	77	297	1 953	N/A	N/A	N/A
GOLD	G	54 070	1 029 159	117 834	2 242 858	N/A	N/A	N/A
GYPSUM	TONNE	1 439	18 736	8 811	87 908	N/A	N/A	N/A
IRON ORE	TONNE	3 214	149 562	37 553	1 254 248	N/A	N/A	N/A
LEAD	KG	8 500	8 984	390 503	412 761	N/A	N/A	N/A
LIME	TONNE	1 535	116 222	2 271	177 900	N/A	N/A	N/A
MOLYBDENUM	KG	0	0	11 581	92 648	N/A	N/A	N/A
NATURAL GAS	K CU M	508	62 050	71 962	4 310 674	N/A	N/A	N/A
NATURAL GAS BY-PROD.	CU M	0	0	20 879	2 016 864	N/A	N/A	N/A
NEPHELINE SYENITE	TONNE	499	21 404	499	21 404	N/A	N/A	N/A
NICKEL	KG	131 528	902 417	187 805	1 288 531	N/A	N/A	N/A
PEAT	TONNE	N/A	N/A	720	82 384	N/A	N/A	N/A
PETROLEUM	CU M	133	18 933	87 108	11 992 672	N/A	N/A	N/A
PLATINUM GROUP	KG	N/A	N/A	13	N/A	N/A	N/A	N/A
POTASH	TONNE	0	0	7 465	705 826	N/A	N/A	N/A

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

VOLUME AND VALUE OF MINERAL PRODUCTION IN 1987

IN ONTARIO, CANADA AND THE WORLD

MINERAL COMMODITY	UNIT OF VOLUME	ONTARIO		CANADA		WORLD VOLUME IN 000'S	ONTARIO VOLUME AS % OF WORLD VOLUME	CANADA VOLUME AS % OF WORLD VOLUME
		VOLUME	$ VALUE	VOLUME	$ VALUE			
		IN 000'S		IN 000'S				
QUARTZ	TONNE	326	10 106	1 960	43 786	N/A	N/A	N/A
SALT	TONNE	5 724	140 489	10 294	235 420	N/A	N/A	N/A
SAND & GRAVEL	TONNE	94 500	289 170	260 265	729 147	N/A	N/A	N/A
SELENIUM	KG	336	6 213	496	9 177	N/A	N/A	N/A
SILVER	KG	336	100 457	1 250	373 681	N/A	N/A	N/A
SOAPSTONE,TALC	TONNE	N/A	11 476	141	16 119	N/A	N/A	N/A
SODIUM SULPHATE	TONNE	0	0	340	26 039	N/A	N/A	N/A
STONE	TONNE	59 925	280 711	114 600	567 406	N/A	N/A	N/A
SULPHUR	TONNE	498	50 145	7 691	744 031	N/A	N/A	N/A
TANTALUM(TA205)	KG	0	0	36	2 358	N/A	N/A	N/A
TELLURIUM	KG	8	234	27	801	N/A	N/A	N/A
URANIUM(U)	KG	4 364	509 235	13 202	1 121 099	N/A	N/A	N/A
ZINC	KG	323 057	411 574	1 329 408	1 693 665	N/A	N/A	N/A
TOTAL VALUE OF ALL MINERAL COMMODITIES IN 1987			5 413 573 *		35 238 800 *			

* THIS TOTAL IS UNDERESTIMATED SINCE IT CONSIDERS N/A (NOT AVAILABLE) AS "0".

* DOES NOT INCLUDE OTHER MINERALS(ARSENIOUS TRIOXIDE, PUMICE, SAMARIUM AND TIN).

NOTE: THE 1987 DATA ARE PRELIMINARY ESTIMATES AND CAN VARY WIDELY (+/- 25 % OR MORE) FROM THE FINAL CENSUS DATA WHICH WILL BE COLLECTED DURING 1988.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

VOLUME AND VALUE OF MINERAL PRODUCTION IN 1986

IN ONTARIO, CANADA AND THE WORLD

		ONTARIO		CANADA			ONTARIO VOLUME AS % OF WORLD VOLUME	CANADA VOLUME AS % OF WORLD VOLUME
MINERAL COMMODITY	UNIT OF VOLUME	VOLUME IN 000'S	$ VALUE IN 000'S	VOLUME IN 000'S	$ VALUE IN 000'S	WORLD VOLUME IN 000'S		
ANTIMONY	KG	N/A	N/A	3 805	12 332	55 248	.00	6.89
ASBESTOS	TONNE	0	0	662	234 053	4 100	.00	16.15
BARITE	TONNE	10	2 000	40	4 215	4 264	.23	.94
BISMUTH	KG	N/A	N/A	153	1 413	4 082	.05	3.75
CADMIUM	KG	760	2 904	1 436	5 490	18 400	4.13	7.80
CALCIUM	KG	312	3 743	312	3 743	N/A	N/A	N/A
CEMENT	TONNE	4 843	329 021	11 001	810 279	1 012 418	.48	1.09
CLAY PRODUCTS	N/A	N/A	108 067	N/A	177 584	N/A	N/A	N/A
COAL	TONNE	0	0	57 811	1 725 888	N/A	N/A	N/A
COBALT	KG	2 012	40 323	2 297	46 623	31 842	6.32	7.21
COLUMBIUM(CB205)	KG	0	0	0	0	14 969	.00	.00
COPPER	KG	264 413	534 006	698 070	1 419 533	8 110 000	3.26	8.61
GEMSTONES	KG	137	198	354	1 287	N/A	N/A	N/A
GOLD	G	46 141	755 187	102 761	1 684 724	1 555 174	2.97	6.61
GYPSUM	TONNE	1 321	16 974	8 803	83 072	83 915	1.57	10.49
IRON ORE	TONNE	3 459	176 488	36 165	1 342 666	871 463	.40	4.15
LEAD	KG	6 065	4 130	334 119	227 502	3 400 000	.18	9.83
LIME	TONNE	1 591	96 341	2 323	156 131	111 584	1.43	2.08
MAGNESIUM	KG	8 748	41 001	8 748	41 001	N/A	N/A	N/A
MOLYBDENUM	KG	0	0	11 251	90 111	87 997	.00	12.79
NATURAL GAS	K CU M	529	68 269	71 921	5 626 309	N/A	N/A	N/A
NATURAL GAS BY-PROD.	CU M	0	0	19 127	1 802 454	N/A	N/A	N/A
NEPHELINE SYENITE	TONNE	467	19 848	467	19 848	N/A	N/A	N/A
NICKEL	KG	121 851	731 440	163 639	979 100	724 931	16.81	22.57
PEAT	TONNE	5	785	738	80 152	257 096	.00	.29

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

VOLUME AND VALUE OF MINERAL PRODUCTION IN 1986

IN ONTARIO, CANADA AND THE WORLD

MINERAL COMMODITY	UNIT OF VOLUME	ONTARIO		CANADA		WORLD VOLUME IN 000'S	ONTARIO VOLUME AS % OF WORLD VOLUME	CANADA VOLUME AS % OF WORLD VOLUME
		VOLUME IN 000'S	$ VALUE IN 000'S	VOLUME IN 000'S	$ VALUE IN 000'S			
PETROLEUM	CU M	136	17 343	85 468	9 611 884	N/A	N/A	N/A
PLATINUM GROUP	KG	11	180 232	12	N/A	252	4.34	4.76
POTASH	TONNE	0	0	6 752	584 304	27 400	.00	24.64
QUARTZ	TONNE	304	9 230	1 914	40 154	N/A	N/A	N/A
SALT	TONNE	6 240	147 686	10 332	239 629	170 551	3.66	6.06
SAND & GRAVEL	TONNE	85 512	248 185	257 971	678 564	N/A	N/A	N/A
SELENIUM	KG	164	2 391	339	5 386	1 120	14.61	30.27
SILVER	KG	362	91 203	1 102	278 343	12 628	2.86	8.73
SOAPSTONE,TALC	TONNE	55	10 524	123	15 062	N/A	N/A	N/A
SODIUM SULPHATE	TONNE	0	0	371	33 012	1 996	.00	18.59
STONE	TONNE	53 438	243 398	105 563	505 923	N/A	N/A	N/A
SULPHUR	TONNE	461	30 862	7 720	929 820	55 000	.84	14.04
TANTALUM(TA205)	KG	0	0	39	3 470	N/A	N/A	N/A
TELLURIUM	KG	10	355	20	706	100	10.31	20.00
TIN	KG	0	0	0	0	167 000	.00	.00
TUNGSTEN(WO3)	KG	0	0	2 470	N/A	45 500	.00	5.43
URANIUM(U)	KG	4 752	566 134	11 502	1 042 334	N/A	N/A	N/A
ZINC	KG	285 452	346 824	1 008 377	1 225 178	6 650 000	4.29	15.16
TOTAL VALUE OF ALL MINERAL COMMODITIES IN 1986			@ 4 825 092		31 769 279 *			

* THIS TOTAL IS UNDERESTIMATED SINCE IT CONSIDERS N/A (NOT AVAILABLE) AS "0".

@ DOES NOT INCLUDE VALUE OF YTTRIUM AND STRONTIUM WHICH PRODUCED IN ONTARIO IN 1986 & OTHER NON-METALS.

NOTE: VALUE OF LIME AND VALUE OF CEMENT PRODUCED IN ONTARIO EXCLUDE THE VALUE OF STONE USED TO PRODUCE THE LIME AND CEMENT. IN 1986 $8,202,151 WAS DEDUCTED FROM CEMENT AND $8,138,523 WAS DEDUCTED FROM LIME. THIS REPORT EXCLUDES FELDSPAR,LIZARDITE FILLER & TERRAZO CHIPS.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

VOLUME AND VALUE OF MINERAL PRODUCTION IN 1985

IN ONTARIO, CANADA AND THE WORLD

		ONTARIO		CANADA				
MINERAL COMMODITY	UNIT OF VOLUME	VOLUME IN 000'S	$ VALUE IN 000'S	VOLUME IN 000'S	$ VALUE IN 000'S	WORLD VOLUME IN 000'S	ONTARIO VOLUME AS % OF WORLD VOLUME	CANADA VOLUME AS % OF WORLD VOLUME
ANTIMONY	KG	0	0	1 075	6 476	54 994	.00	1.95
ASBESTOS	TONNE	0	0	750	298 596	4 111	.00	18.24
BARITE	TONNE	9	1 800	71	5 502	6 052	.15	1.17
BISMUTH	KG	0	0	200	3 922	4 173	.00	4.79
CADMIUM	KG	848	2 586	1 667	5 563	18 662	4.54	8.93
CALCIUM	KG	739	7 789	N/A	N/A	N/A	N/A	N/A
CEMENT	TONNE	4 044	265 048	10 143	769 728	971 843	.42	1.04
CLAY PRODUCTS	N/A	N/A	86 654	N/A	135 772	N/A	N/A	N/A
COAL	TONNE	0	0	60 436	1 845 130	N/A	N/A	N/A
COBALT	KG	1 731	60 434	2 067	71 960	36 167	4.79	5.72
COLUMBIUM(CB205)	KG	0	0	N/A	N/A	15 896	.00	.00
COPPER	KG	278 540	545 235	732 485	1 446 769	8 114 000	3.43	9.03
GOLD	G	31 600	441 493	86 900	1 211 773	1 499 810	2.11	5.79
GYPSUM	TONNE	1 114	15 056	8 447	75 076	80 939	1.38	10.44
IRON ORE	TONNE	4 328	232 496	39 483	1 229 758	858 864	.50	4.60
LEAD	KG	3 819	1 907	268 299	154 552	3 390 000	.11	7.91
LIME	TONNE	1 652	109 976	2 313	165 672	112 065	1.47	2.06
MAGNESITIC DOLOMITE	TONNE	0	0	136	20 266	N/A	N/A	N/A
MAGNESIUM	KG	8 446	36 370	N/A	N/A	N/A	N/A	N/A
MAGNETITE	TONNE	4	50	N/A	N/A	N/A	N/A	N/A
MOLYBDENUM	KG	0	0	7 852	74 359	97 585	.00	8.05
NATURAL GAS	K CU M	590	73 143	84 413	8 056 232	N/A	N/A	N/A
NATURAL GAS BY-PROD.	CU M	0	0	19 681	2 809 781	N/A	N/A	N/A
NEPHELINE SYENITE	TONNE	467	18 603	467	18 603	N/A	N/A	N/A
NICKEL	KG	131 035	930 760	169 971	1 217 387	777 230	16.86	21.87

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

VOLUME AND VALUE OF MINERAL PRODUCTION IN 1985

IN ONTARIO, CANADA AND THE WORLD

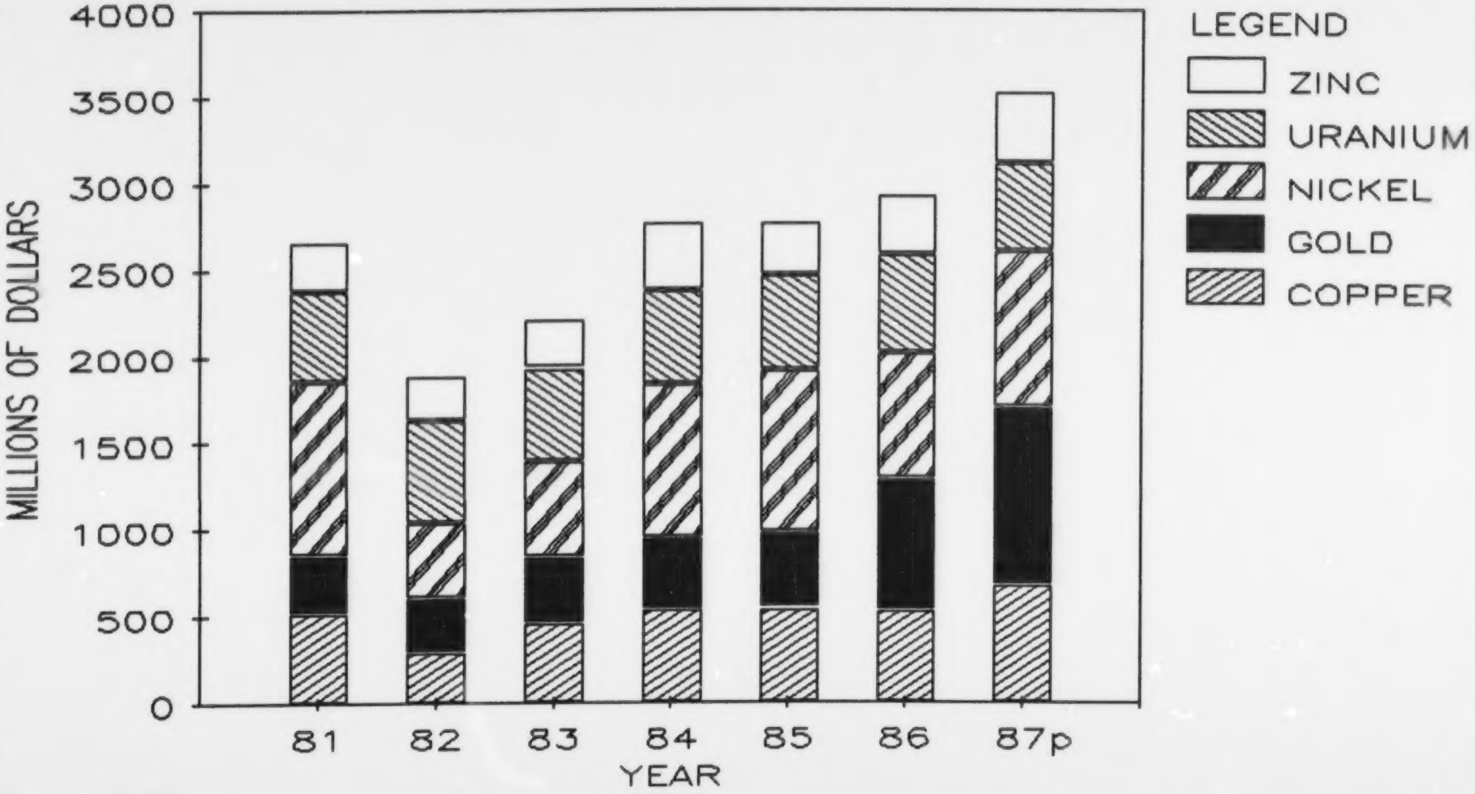
MINERAL COMMODITY	UNIT OF VOLUME	ONTARIO		CANADA		WORLD VOLUME IN 000'S	ONTARIO VOLUME AS % OF WORLD VOLUME	CANADA VOLUME AS % OF WORLD VOLUME
		VOLUME	$ VALUE	VOLUME	$ VALUE			
		IN 000'S		IN 000'S				
PEAT	TONNE	6	908	643	63 925	256 829	.00	.25
PETROLEUM	CU M	113	24 737	85 564	18 417 949	N/A	N/A	N/A
PLATINUM GROUP	KG	12	153 626	N/A	N/A	249	4.66	.00
POTASH	TONNE	0	0	6 661	N/A	28 618	.00	23.28
QUARTZ	TONNE	362	9 904	1 905	41 031	N/A	N/A	N/A
SALT	TONNE	5 829	125 233	10 085	215 362	170 272	3.42	5.92
SAND & GRAVEL	TONNE	64 502	158 347	242 890	576 296	N/A	N/A	N/A
SELENIUM	KG	120	2 625	314	6 850	1 120	10.74	28.04
SILVER	KG	430	116 942	1 171	323 711	12 824	3.35	9.13
SOAPSTONE,TALC	TONNE	48	9 624	127	14 502	N/A	N/A	N/A
SODIUM SULPHATE	TONNE	0	0	366	33 871	1 988	.00	18.41
STONE	TONNE	45 854	211 666	95 306	449 500	N/A	N/A	N/A
SULPHUR	TONNE	450	38 257	8 924	1 112 521	54 856	.82	16.27
TELLURIUM	KG	5	159	19	645	100	4.80	19.00
TIN	KG	0	0	120	1 893	190 000	.00	.06
TUNGSTEN(WO3)	KG	0	0	4 031	N/A	46 976	.00	8.58
URANIUM(U)	KG	4 499	552 561	10 441	1 002 127	N/A	N/A	N/A
ZINC	KG	266 938	301 001	1 035 738	1 265 076	6 656 000	4.01	15.56
TOTAL VALUE OF ALL MINERAL COMMODITIES IN 1985			4 534 990		43 148 136 *			

* THIS TOTAL IS UNDERESTIMATED SINCE IT CONSIDERS N/A (NOT AVAILABLE) AS "0".

NOTE: VALUE OF LIME AND VALUE OF CEMENT PRODUCED IN ONTARIO EXCLUDE THE VALUE OF STONE USED TO PRODUCE THE LIME AND CEMENT. IN 1985 $8,330,312 WAS DEDUCTED FROM CEMENT AND $6,162,192 WAS DEDUCTED FROM LIME.
THIS REPORT EXCLUDES FELDSPAR,GEMSTONES,SERPENTINE FILLER & TERRAZO CHIPS.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

VALUE OF MAJOR MINERAL PRODUCTION IN ONTARIO 1981 — 1987p



Source:Mineral Analysis and Statistics Section, MNDM

PRELIMINARY ESTIMATE OF THE MINERAL PRODUCTION OF CANADA, BY PROVINCE, 1987

IN 000'S

		NFLD	P.E.I.	N.S.	N.B.	QUE.	ONT.
FUELS							
COAL	TONNE	0	0	2 820	550	0	0
	$	0	0	170 700	32 800	0	0
NATURAL GAS	K CU M	0	0	0	1	0	508
	$	0	0	0	14	0	62 050
NATURAL GAS BY-PROD.	CU M	0	0	0	0	0	0
	$	0	0	0	0	0	0
PETROLEUM,CRUDE	CU M	0	0	5	0	0	133
	$	0	0	448	13	0	18 933
TOTAL	$	0	0	171 148	32 827	0	80 983
METALLIC MINERAL							
ANTIMONY	KG	0	0	0	3 171	0	0
	$	0	0	0	10 797	0	0
BISMUTH	KG	0	0	0	177	0	N/A
	$	0	0	0	1 874	0	3
CADMIUM	KG	10	0	0	61	90	1 512
	$	58	0	0	346	509	8 602
COBALT	KG	0	0	0	0	0	2 484
	$	0	0	0	0	0	47 034
COPPER	KG	0	0	0	7 767	56 378	280 634
	$	0	0	0	18 673	135 533	674 643
GOLD	G	N/A	0	N/A	442	29 200	54 070
	$	7 804	0	2 960	8 417	555 793	1 029 159
IRON ORE	TONNE	18 775	0	0	0	15 500	3 214
	$	685 423	0	0	0	N/A	N/A
LEAD	KG	0	0	0	79 433	0	8 500
	$	0	0	0	83 960	0	8 984
MOLYBDENUM	KG	0	0	0	0	0	0
	$	0	0	0	0	0	0

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

PRELIMINARY ESTIMATE OF THE MINERAL PRODUCTION OF CANADA, BY PROVINCE, 1987

MAN.	SASK.	ALTA	B.C.	YUKON	N.W.T.	CANADA	
				IN 000'S			
							FUELS
0	9 910	25 070	21 440	0	0	59 790	COAL
0	111 500	396 200	923 800	0	0	1 635 000	
0	1 706	62 195	7 378	0	174	71 962	NATURAL GAS
0	100 865	3 843 639	292 611	0	11 495	4 310 674	
5	203	20 111	532	0	28	20 879	NATURAL GAS BY-PROD.
471	17 221	1 955 955	40 815	0	2 402	2 016 864	
777	11 738	70 835	2 128	0	1 492	87 108	PETROLEUM,CRUDE
112 761	1 417 517	10 003 912	312 880	0	126 208	11 992 672	
113 232	1 647 103	16 199 706	1 570 106	0	140 105	19 955 210	TOTAL
							METALLIC MINERAL
0	0	0	373	16	15	3 575	ANTIMONY
0	0	0	2 178	95	88	13 158	
0	0	0	0	0	0	178	BISMUTH
0	0	0	5	7	2	1 891	
115	1	0	340	5	160	2 294	CADMIUM
655	7	0	1 935	26	912	13 050	
393	0	0	0	0	0	2 877	COBALT
7 432	0	0	0	0	0	54 466	
71 791	2 474	0	348 246	9	0	767 299	COPPER
172 586	5 948	0	837 183	22	0	1 844 588	
3 753	946	17	11 925	5 106	11 810	117 834	GOLD
71 431	18 002	329	226 980	97 186	224 797	2 242 858	
0	0	0	64	0	0	37 553	IRON ORE
0	0	0	2 313	0	0	1 254 248	
594	0	0	67 210	100 267	134 499	390 503	LEAD
628	0	0	71 041	105 982	142 166	412 761	
0	0	0	11 581	0	0	11 581	MOLYBDENUM
0	0	0	92 648	0	0	92 648	

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

PRELIMINARY ESTIMATE OF THE MINERAL PRODUCTION OF CANADA, BY PROVINCE, 1987

IN 000'S

		NFLD	P.E.I.	N.S.	N.B.	QUE.	ONT.
METALLIC MINERAL							
NICKEL	KG	0	0	0	0	0	131 528
	$	0	0	0	0	0	902 417
PLATINUM GROUP	KG	0	0	0	0	0	N/A
	$	0	0	0	0	0	N/A
SELENIUM	KG	0	0	0	0	97	336
	$	0	0	0	0	1 801	6 213
SILVER	KG	0	0	0	208	123	336
	$	15	0	1	62 248	36 852	100 457
TANTALUM(TA205)	KG	0	0	0	0	0	0
	$	0	0	0	0	0	0
TELLURIUM	KG	0	0	0	0	11	8
	$	0	0	0	0	319	234
URANIUM(U)	KG	0	0	0	0	0	4 364
	$	0	0	0	0	0	509 235
ZINC	KG	13 358	0	0	231 410	93 200	323 057
	$	17 018	0	0	294 816	118 737	411 574
TOTAL	$	710 318	0	2 961	481 131	1 491 308	4 109 568
NON-METALLIC MINERAL							
ASBESTOS	TONNE	60	0	0	0	510	0
	$	21 000	0	0	0	166 377	0
BARITE	TONNE	0	0	N/A	0	0	N/A
	$	0	0	1 360	0	0	1 400
GEMSTONES	KG	0	0	0	0	0	N/A
	$	0	0	0	0	0	77
GYPSUM	TONNE	410	0	6 034	0	0	1 439
	$	4 656	0	51 010	0	0	18 736
NEPHELINE SYENITE	TONNE	0	0	0	0	0	499
	$	0	0	0	0	0	21 404

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

PRELIMINARY ESTIMATE OF THE MINERAL PRODUCTION OF CANADA, BY PROVINCE, 1987

IN 000'S

MAN.	SASK.	ALTA	B.C.	YUKON	N.W.T.	CANADA	
							METALLIC MINERAL
56 277	0	0	0	0	0	187 805	NICKEL
386 114	0	0	0	0	0	1 288 531	
0	0	0	0	0	0	13	PLATINUM GROUP
0	0	0	0	0	0	N/A	
58	5	0	0	0	0	496	SELENIUM
1 080	83	0	0	0	0	9 177	
38	2	0	397	133	13	1 250	SILVER
11 272	478	0	118 796	39 735	3 827	373 681	
36	0	0	0	0	0	36	TANTALUM(TA2O5)
2 358	0	0	0	0	0	2 358	
8	0	0	0	0	0	27	TELLURIUM
231	17	0	0	0	0	801	
0	8 838	0	0	0	0	13 202	URANIUM(U)
0	611 864	0	0	0	0	1 121 099	
66 164	1 431	0	118 656	154 479	327 653	1 329 408	ZINC
84 294	1 823	0	151 168	196 806	417 429	1 693 665	
759 759	638 222	329	1 505 789	439 859	789 221	10 928 465	TOTAL
							NON-METALLIC MINERAL
0	0	0	95	0	0	665	ASBESTOS
0	0	0	47 791	0	0	235 168	
0	0	0	N/A	0	0	41	BARITE
0	0	0	1 126	0	0	3 886	
0	0	0	N/A	0	0	297	GEMSTONES
0	0	0	1 876	0	0	1 953	
431	0	0	497	0	0	8 811	GYPSUM
8 202	0	0	5 304	0	0	87 908	
0	0	0	0	0	0	499	NEPHELINE SYENITE
0	0	0	0	0	0	21 404	

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

PRELIMINARY ESTIMATE OF THE MINERAL PRODUCTION OF CANADA, BY PROVINCE, 1987

		NFLD	P.E.I.	N.S.	N.B.	QUE.	ONT.
			IN 000'S				
NON-METALLIC MINERAL							
PEAT	TONNE	4	0	N/A	241	300	N/A
	$	673	0	N/A	25 288	26 250	N/A
POTASH(K2O)	TONNE	0	0	0	N/A	0	0
	$	0	0	0	N/A	0	0
QUARTZ	TONNE	N/A	0	N/A	N/A	850	326
	$	1 150	0	N/A	N/A	18 162	10 106
SALT	TONNE	0	0	N/A	N/A	N/A	5 724
	$	0	0	N/A	N/A	N/A	140 489
SOAPSTONE,TALC	TONNE	N/A	0	0	0	N/A	N/A
	$	1 668	0	0	0	2 975	11 476
SODIUM SULPHATE	TONNE	0	0	0	0	0	0
	$	0	0	0	0	0	0
SULPHUR (ELEMENTAL)	TONNE	0	0	0	0	0	0
	$	0	0	0	0	0	38
SULPHUR SMELTER GAS	TONNE	0	0	0	91	50	498
	$	0	0	0	11 140	8 100	50 107
TOTAL	$	29 147	0	88 324	142 539	501 210	255 354
OTHER MINERALS							
OTHER MINERALS		N/A	N/A	N/A	N/A	N/A	N/A
	$	1 650	0	31 699	0	0	0
TOTAL	$	1 650	0	31 699	0	0	0
STRUCTURAL MATERIAL							
CEMENT	TONNE	N/A	0	N/A	N/A	3 600	5 201
	$	9 541	0	39 509	9 285	216 900	413 671
CLAY PRODUCTS		N/A	N/A	N/A	N/A	N/A	N/A
	$	960	0	7 730	2 850	37 250	130 866

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

PRELIMINARY ESTIMATE OF THE MINERAL PRODUCTION OF CANADA, BY PROVINCE, 1987

MAN.	SASK.	ALTA	B.C.	YUKON	N.W.T.	CANADA	
				IN 000'S			
							NON-METALLIC MINERAL
N/A	N/A	74	N/A	0	0	720	PEAT
N/A	N/A	14 395	N/A	0	0	82 384	
0	N/A	0	0	0	0	7 465	POTASH(K2O)
0	N/A	0	0	0	0	705 826	
N/A	134	N/A	N/A	0	0	1 960	QUARTZ
N/A	N/A	4 300	2 309	0	0	43 786	
0	448	1 470	0	0	0	10 294	SALT
0	24 506	15 380	0	0	0	235 420	
0	0	0	0	0	0	141	SOAPSTONE,TALC
0	0	0	0	0	0	16 119	
0	N/A	N/A	0	0	0	340	SODIUM SULPHATE
0	23 223	2 816	0	0	0	26 039	
2	10	6 583	293	0	0	6 888	SULPHUR (ELEMENTAL)
191	1 102	604 805	44 626	0	0	650 762	
41	0	0	23	0	100	803	SULPHUR SMELTER GAS
5 079	0	0	3 464	0	15 379	93 269	
26 779	657 902	641 696	122 110	0	15 379	2 480 440	TOTAL
							OTHER MINERALS
N/A	N/A	N/A	N/A	N/A	N/A	N/A	OTHER MINERALS
0	0	0	0	0	370	33 719	
0	0	0	0	0	370	33 719	TOTAL
							STRUCTURAL MATERIAL
451	N/A	1 075	1 247	0	0	12 205	CEMENT
48 868	17 904	132 060	88 287	0	0	976 025	
N/A	N/A	N/A	N/A	N/A	N/A	N/A	CLAY PRODUCTS
3 739	5 917	14 063	6 833	0	0	210 208	

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

PRELIMINARY ESTIMATE OF THE MINERAL PRODUCTION OF CANADA, BY PROVINCE, 1987

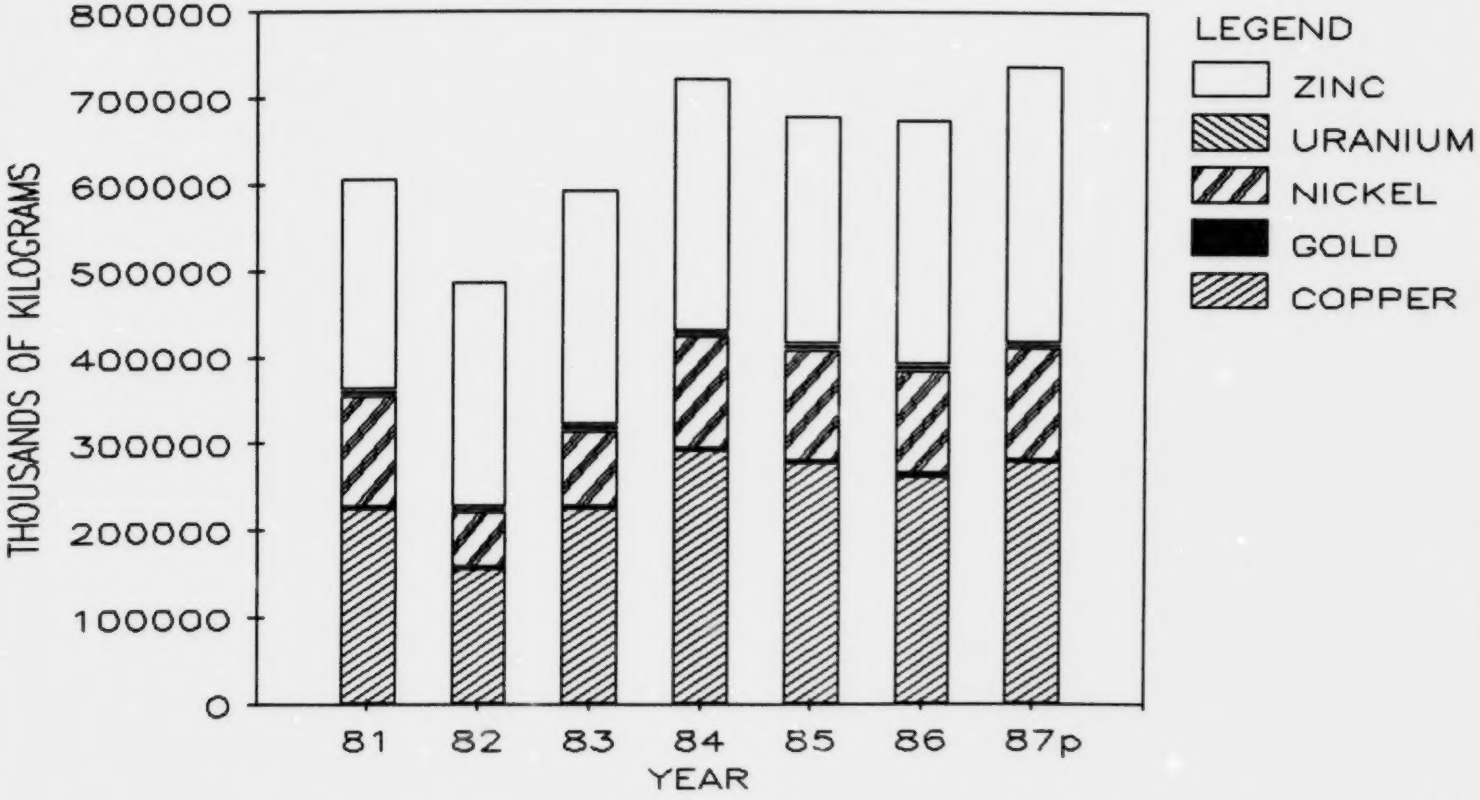
		NFLD	P.E.I.	N.S.	N.B.	QUE.	ONT.
			IN 000'S				
STRUCTURAL MATERIAL							
LIME	TONNE	0	0	0	N/A	N/A	1 535
	$	0	0	0	N/A	N/A	116 222
SAND AND GRAVEL	TONNE	2 650	540	7 575	9 650	31 850	94 500
	$	13 250	1 917	22 725	N/A	N/A	289 170
STONE	TONNE	535	0	4 830	2 465	37 925	59 925
	$	2 950	0	26 000	13 750	189 625	280 711
TOTAL	$	26 701	1 917	95 964	44 212	535 243	1 230 640
GRAND TOTAL	$	767 816	1 917	390 096	700 709	2 527 761	5 676 545

		MAN.	SASK.	ALTA	B.C.	YUKON	N.W.T.	CANADA
			IN 000'S					
STRUCTURAL MATERIAL								
LIME	TONNE	N/A	0	206	115	0	0	2 271
	$	5 317	0	17 738	9 848	0	0	177 900
SAND AND GRAVEL	TONNE	13 000	13 850	44 350	38 600	2 400	1 300	260 265
	$	36 790	29 775	141 025	102 290	6 960	4 225	729 147
STONE	TONNE	4 125	0	260	4 085	110	340	114 600
	$	28 000	0	1 475	23 700	385	810	567 406
TOTAL	$	122 714	53 596	306 361	230 958	7 345	5 035	2 660 686
GRAND TOTAL	$	1 022 484	2 996 823	17 148 092	3 428 963	447 204	950 110	36 058 520

NOTE:TOTAL FOR NON-METALLIC MINERAL DOES NOT INCLUDE OTHER NON METALS

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

VOLUME OF MAJOR MINERAL PRODUCTION IN ONTARIO 1981 – 1987p



Source:Mineral Analysis and Statistics Section, MNDM

REVISED STATISTICS OF THE MINERAL PRODUCTION OF CANADA, BY PROVINCE, 1986

		NFLD	P.E.I.	N.S.	N.B.	QUE.	ONT.
			IN 000'S				
FUELS							
COAL	TONNE	0	0	2 955	485	0	0
	$	0	0	177 940	28 000	0	0
NATURAL GAS	K CU M	0	0	0	1	0	529
	$	0	0	0	14	0	68 269
NATURAL GAS BY-PROD.	CU M	0	0	0	0	0	0
	$	0	0	0	0	0	0
PETROLEUM, CRUDE	CU M	0	0	0	0	0	136
	$	0	0	0	13	0	17 343
TOTAL	$	0	0	177 940	28 027	0	85 612
METALLIC MINERAL							
ANTIMONY	KG	0	0	0	3 258	0	N/A
	$	0	0	0	8 982	0	N/A
BISMUTH	KG	0	0	0	139	0	N/A
	$	0	0	0	1 282	0	N/A
CADMIUM	KG	0	0	0	27	44	760
	$	0	0	0	104	167	2 904
CALCIUM	KG	0	0	0	0	0	312
	$	0	0	0	0	0	3 743
COBALT	KG	0	0	0	0	0	2 012
	$	0	0	0	0	0	40 323
COPPER	KG	0	0	0	6 298	51 622	264 413
	$	0	0	0	12 860	105 412	534 006
GOLD	G	0	0	0	374	28 342	46 141
	$	0	0	0	6 134	465 287	755 187
IRON ORE	TONNE	19 184	0	0	0	13 471	3 459
	$	761 328	0	0	0	X	176 488
LEAD	KG	0	0	0	66 590	0	6 065
	$	0	0	0	45 341	0	4 130

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

REVISED STATISTICS OF THE MINERAL PRODUCTION OF CANADA, BY PROVINCE, 1986

IN 000'S

MAN.	SASK.	ALTA	B.C.	YUKON	N.W.T.	CANADA	
							FUELS
0	8 280	24 950	21 141	0	0	57 811	COAL
0	100 602	445 579	973 767	0	0	1 725 888	
0	1 814	62 556	6 820	0	201	71 921	NATURAL GAS
0	129 792	5 048 927	366 213	0	13 094	5 626 309	
6	205	18 402	465	0	49	19 127	NATURAL GAS BY-PROD.
503	18 184	1 743 605	36 717	0	3 445	1 802 454	
823	11 688	69 322	2 021	0	1 478	85 468	PETROLEUM, CRUDE
95 337	1 172 413	7 978 155	245 326	0	103 296	9 611 883	
95 840	1 420 991	15 216 266	1 622 023	0	119 835	18 766 534	TOTAL
							METALLIC MINERAL
1	0	0	489	32	24	3 804	ANTIMONY
9	0	0	2 993	195	147	12 332	
0	0	0	11	0	0	153	BISMUTH
0	0	0	N/A	5	N/A	1 413	
118	5	0	305	2	175	1 436	CADMIUM
453	20	0	1 164	8	670	5 490	
0	0	0	0	0	0	312	CALCIUM
0	0	0	0	0	0	3 743	
285	0	0	0	0	0	2 297	COBALT
6 300	0	0	0	0	0	46 623	
65 369	3 506	0	306 855	6	1	698 070	COPPER
133 483	7 160	0	626 598	13	1	1 419 533	
2 555	14	36	9 249	3 547	12 503	102 761	GOLD
41 954	228	594	151 837	58 237	205 266	1 684 724	
0	0	0	51	0	0	36 165	IRON ORE
0	0	0	2 217	0	0	1 342 666	
590	0	0	91 947	35 091	133 836	334 119	LEAD
402	0	0	62 607	23 893	91 129	227 502	

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

REVISED STATISTICS OF THE MINERAL PRODUCTION OF CANADA, BY PROVINCE, 1986

		NFLD	P.E.I.	N.S.	N.B.	QUE.	ONT.
			IN 000'S				
METALLIC MINERAL							
MAGNESIUM	KG	0	0	0	0	0	8 748
	$	0	0	0	0	0	41 001
MOLYBDENUM	KG	0	0	0	0	355	0
	$	0	0	0	0	2 389	0
NICKEL	KG	0	0	0	0	0	121 851
	$	0	0	0	0	0	731 440
PLATINUM GROUP	KG	0	0	0	0	0	11
	$	0	0	0	0	0	180 232
SELENIUM	KG	0	0	0	0	115	164
	$	0	0	0	0	1 977	2 391
SILVER	KG	0	0	0	163	62	362
	$	0	0	0	41 168	15 730	91 203
STRONTIUM	KG	0	0	0	0	0	N/A
	$	0	0	0	0	0	N/A
TANTALUM(TA2O5)	KG	0	0	0	0	0	0
	$	0	0	0	0	0	0
TELLURIUM	KG	0	0	0	0	5	10
	$	0	0	0	0	168	355
TUNGSTEN(WO3)	KG	0	0	0	0	0	0
	$	0	0	0	0	0	0
URANIUM(U)	KG	0	0	0	0	0	4 752
	$	0	0	0	0	0	566 134
YTTRIUM	KG	0	0	0	0	0	N/A
	$	0	0	0	0	0	N/A
ZINC	KG	5 712	0	0	161 807	37 126	285 452
	$	6 940	0	0	196 595	45 108	346 824
TOTAL	$	768 268	0	0	312 466	1 223 506	3 479 849
NON-METALLIC MINERAL							

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

REVISED STATISTICS OF THE MINERAL PRODUCTION OF CANADA, BY PROVINCE, 1986

MAN.	SASK.	ALTA	B.C.	YUKON	N.W.T.	CANADA	
				IN 000'S			
							METALLIC MINERAL
0	0	0	0	0	0	8 748	MAGNESIUM
0	0	0	0	0	0	41 001	
0	0	0	10 896	0	0	11 251	MOLYBDENUM
0	0	0	87 722	0	0	90 111	
41 788	0	0	0	0	0	163 639	NICKEL
247 660	0	0	0	0	0	979 100	
N/A	0	0	0	0	0	12	PLATINUM GROUP
N/A	0	0	0	0	0	N/A	
53	7	0	0	0	0	339	SELENIUM
904	114	0	0	0	0	5 386	
37	3	0	380	73	22	1 102	SILVER
9 458	795	0	96 044	18 468	5 478	278 344	
0	0	0	0	0	0	N/A	STRONTIUM
0	0	0	0	0	0	N/A	
39	0	0	0	0	0	39	TANTALUM(TA2O5)
3 470	0	0	0	0	0	3 470	
5	0	0	0	0	0	20	TELLURIUM
162	21	0	0	0	0	706	
0	0	0	0	0	2 470	2 470	TUNGSTEN(WO3)
0	0	0	0	0	N/A	N/A	
0	6 750	0	0	0	0	11 502	URANIUM(U)
0	476 200	0	0	0	0	1 042 334	
N/A	0	0	0	0	0	N/A	YTTRIUM
N/A	0	0	0	0	0	N/A	
61 463	3 527	0	137 583	50 634	265 073	1 008 377	ZINC
74 677	4 286	0	167 163	61 521	322 064	1 225 178	
534 970	488 824	594	1 199 898	162 340	642 118	8 812 833	TOTAL
							NON-METALLIC MINERAL

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

REVISED STATISTICS OF THE MINERAL PRODUCTION OF CANADA, BY PROVINCE, 1986

IN 000'S

NON-METALLIC MINERAL		NFLD	P.E.I.	N.S.	N.B.	QUE.	ONT.
ARSENIOUS TRIOXSIDE	TONNE	0	0	0	0	0	N/A
	$	0	0	0	0	0	N/A
ASBESTOS	TONNE	43	0	0	0	541	0
	$	16 354	0	0	0	178 036	0
BARITE	TONNE	N/A	0	N/A	0	0	10
	$	31	0	1 335	0	0	2 000
GEMSTONES	KG	0	0	0	0	0	137
	$	0	0	0	0	0	196
GYPSUM	TONNE	486	0	6 264	0	0	1 321
	$	6 038	0	50 125	0	0	16 974
LIZARDITE FILLER	TONNE	0	0	0	0	0	N/A
	$	0	0	0	0	0	N/A
MAGNETITE	TONNE	0	0	0	0	0	N/A
	$	0	0	0	0	0	N/A
NEPHELINE SYENITE	TONNE	0	0	0	0	0	467
	$	0	0	0	0	0	19 848
PEAT	TONNE	2	0	N/A	228	334	5
	$	149	0	N/A	21 351	30 059	785
POTASH(K2O)	TONNE	0	0	0	N/A	0	0
	$	0	0	0	N/A	0	0
QUARTZ	TONNE	N/A	0	N/A	N/A	837	304
	$	1 526	0	N/A	N/A	17 025	9 230
SALT	TONNE	0	0	N/A	N/A	N/A	6 240
	$	0	0	N/A	N/A	N/A	147 686
SOAPSTONE,TALC	TONNE	N/A	0	0	0	N/A	55
	$	1 346	0	0	0	3 192	10 524
SODIUM SULPHATE	TONNE	0	0	0	0	0	0
	$	0	0	0	0	0	0

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

REVISED STATISTICS OF THE MINERAL PRODUCTION OF CANADA, BY PROVINCE, 1986

IN 000'S

MAN.	SASK.	ALTA	B.C.	YUKON	N.W.T.	CANADA	NON-METALLIC MINERAL
0	0	0	0	0	0	N/A	ARSENIOUS TRIOXSIDE
0	0	0	0	0	0	N/A	
0	0	0	78	0	0	662	ASBESTOS
0	0	0	39 663	0	0	234 053	
0	0	0	N/A	0	0	40	BARITE
0	0	0	849	0	0	4 215	
0	0	0	N/A	0	0	354	GEMSTONES
0	0	0	1 089	0	0	1 287	
247	0	0	485	0	0	8 803	GYPSUM
5 039	0	0	4 896	0	0	83 072	
0	0	0	0	0	0	N/A	LIZARDITE FILLER
0	0	0	0	0	0	N/A	
0	0	0	0	0	0	N/A	MAGNETITE
0	0	0	0	0	0	N/A	
0	0	0	0	0	0	467	NEPHELINE SYENITE
0	0	0	0	0	0	19 848	
N/A	N/A	72	0	0	0	738	PEAT
N/A	N/A	13 930	0	0	0	80 152	
0	N/A	0	0	0	0	6 752	POTASH(K2O)
0	N/A	0	0	0	0	584 304	
N/A	128	N/A	N/A	0	0	1 914	QUARTZ
N/A	N/A	3 355	1 896	0	0	40 154	
0	473	1 304	0	0	0	10 332	SALT
0	25 759	14 216	0	0	0	239 629	
0	0	0	0	0	0	123	SOAPSTONE,TALC
0	0	0	0	0	0	15 062	
0	N/A	N/A	0	0	0	371	SODIUM SULPHATE
0	29 038	3 974	0	0	0	33 012	

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

REVISED STATISTICS OF THE MINERAL PRODUCTION OF CANADA, BY PROVINCE, 1986

		NFLD	P.E.I.	N.S.	N.B.	QUE.	ONT.
			IN 000'S				
NON-METALLIC MINERAL							
SULPHUR (ELEMENTAL)	TONNE	0	0	0	0	0	0
	$	0	0	0	0	0	41
SULPHUR SMELTER GAS	TONNE	0	0	0	84	42	461
	$	0	0	0	8 956	7 492	30 821
TOTAL	$	25 444	0	91 019	118 813	490 682	238 881
OTHER MINERALS							
OTHER MINERALS		N/A	N/A	N/A	N/A	N/A	N/A
	$	0	0	20 705	0	0	0
TOTAL	$	0	0	20 705	0	0	0
STRUCTURAL MATERIAL							
CEMENT	TONNE	N/A	0	N/A	N/A	3 249	4 843
	$	8 530	0	25 430	9 526	190 289	329 021
CLAY PRODUCTS		N/A	N/A	N/A	N/A	N/A	N/A
	$	1 273	0	7 616	3 026	29 621	108 067
LIME	TONNE	0	0	0	N/A	N/A	1 591
	$	0	0	0	N/A	N/A	96 341
SAND AND GRAVEL	TONNE	2 343	501	7 889	8 972	29 607	85 512
	$	11 112	1 754	22 064	N/A	N/A	248 185
STONE	TONNE	476	0	4 023	2 344	36 066	53 438
	$	2 712	0	21 944	13 064	172 194	243 398
TOTAL	$	23 627	1 754	77 054	42 264	476 350	1 025 012
GRAND TOTAL	$	817 339	1 754	366 718	501 570	2 190 538	4 829 354

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

REVISED STATISTICS OF THE MINERAL PRODUCTION OF CANADA, BY PROVINCE, 1986

MAN.	SASK.	ALTA	B.C.	YUKON	N.W.T.	CANADA	
				IN 000'S			
							NON-METALLIC MINERAL
1	12	6 657	295	0	0	6 965	SULPHUR (ELEMENTAL)
176	1 484	803 995	51 889	0	0	857 585	
1	0	0	20	0	147	755	SULPHUR SMELTER GAS
211	0	13	2 953	1	21 788	72 235	
17 756	560 848	839 483	117 882	1	21 788	2 522 597	TOTAL
							OTHER MINERALS
N/A	N/A	N/A	N/A	N/A	N/A	N/A	OTHER MINERALS
0	0	0	517	0	254	21 476	
0	0	0	517	0	254	21 476	TOTAL
							STRUCTURAL MATERIAL
415	N/A	949	1 071	0	0	11 001	CEMENT
43 733	16 683	113 371	73 696	0	0	810 279	
N/A	N/A	N/A	N/A	N/A	N/A	N/A	CLAY PRODUCTS
3 471	5 700	10 158	8 652	0	0	177 584	
N/A	0	193	123	0	0	2 323	LIME
5 540	0	16 196	10 339	0	0	156 131	
13 050	14 190	45 128	42 888	4 902	986	257 971	SAND AND GRAVEL
35 751	31 509	133 092	105 282	13 355	3 281	678 564	
4 100	0	229	4 403	116	368	105 563	STONE
26 831	0	1 315	23 049	405	1 011	505 923	
115 326	53 892	274 132	221 018	13 760	4 292	2 328 481	TOTAL
763 892	2 524 555	16 330 475	3 161 338	176 101	788 287	32 451 921	GRAND TOTAL

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

PRODUCTION OF SAND, GRAVEL AND STONE

PRODUCTION OF SAND AND GRAVEL

MINERAL COMMODITY SUBGROUP	YEAR	VOLUME IN 000'S TONNES	$ VALUE IN 000'S
SAND	1980	26 297	49 394
	1981	23 631	43 913
	1982	16 898	38 454
	1983	18 678	44 930
	1984	19 853	47 965
	1985	20 289	52 870
	1986	26 921	82 908
GRAVEL(NATURAL)	1980	23 681	25 348
	1981	21 345	26 934
	1982	17 412	24 446
	1983	15 757	20 039
	1984	17 742	27 651
	1985	20 581	31 571
	1986	28 174	51 698
CRUSHED GRAVEL	1980	27 618	59 238
	1981	25 230	63 588
	1982	19 258	53 652
	1983	19 167	55 263
	1984	19 851	60 509
	1985	23 632	73 906
	1986	30 416	113 579
TOTAL PRODUCTION OF THE SAND AND GRAVEL INDUSTRY	1980	77 596	133 980
	1981	70 206	134 435
	1982	53 568	116 552
	1983	53 602	120 232
	1984	57 446	136 125
	1985	64 502	158 347
	1986	85 512	248 185

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

PRODUCTION OF STONE

	YEAR	VOLUME IN 000'S TONNES	$ VALUE IN 000'S
GRANITE QUARRIES	1980	1 456	21 211
	1981	1 739	23 297
	1982	1 546	23 569
	1983	1 041	26 551
	1984	1 730	32 477
	1985	2 520	36 839
	1986	1 364	13 628
LIMESTONE QUARRIES	1980	34 817	101 785
	1981	35 568	102 638
	1982	26 737	86 047
	1983	31 962	110 265
	1984	38 808	139 362
	1985	42 281	164 430
	1986	50 819	216 401
MARBLE QUARRIES	1980	N/A	N/A
	1981	90	644
	1982	148	891
	1983	91	4 444
	1984	105	6 275
	1985	190	8 900
	1986	189	8 928
SANDSTONE QUARRIES	1980	4	224
	1981	4	234
	1982	5	259
	1983	5	280
	1984	6	375
	1985	5	296
	1986	58	598
SHALE QUARRIES	1980	27	168
	1981	145	93

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

PRODUCTION OF STONE

	YEAR	VOLUME IN 000'S TONNES	$ VALUE IN 000'S
SHALE QUARRIES	1982	24	19
	1983	733	1 939
	1984	738	970
	1985	858	1 191
	1986	1 008	3 788
SLATE QUARRIES	1980	N/A	N/A
	1981	N/A	N/A
	1982	N/A	N/A
	1983	N/A	N/A
	1984	0	21
	1985	0	10
	1986	0	55
TOTAL PRODUCTION OF * THE STONE INDUSTRY	1980	36 304	123 388
	1981	37 546	126 906
	1982	28 460	110 785
	1983	33 832	143 479
	1984	41 387	179 480
	1985	45 854	211 666
	1986	53 438	243 398

* THESE TOTALS COULD BE UNDERESTIMATED SINCE THEY CONSIDER N/A (NOT AVAILABLE) AS "0".

NOTE: THE VOLUME OF STONE FROM LIMESTONE QUARRIES INCLUDES THE STONE USED IN THE PRODUCTION OF CEMENT + LIME.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

REPORT OF ALL STONE PRODUCTION
IN THE PROVINCE OF ONTARIO
1986

TYPE OF STONE	SOLD *		CONSUMED *	
	TONNES IN 000'S	$ VALUE IN 000'S	TONNES IN 000'S	$ VALUE IN 000'S
DIMENSIONAL STONE				
BUILDING STONE,ROUGH	208	4 993	20	882
MONUMENTAL AND ORNAMENTAL STONE	3	449	1	69
OTHER(FLAGSTONE,ETC.)	17	1 217	0	0
TOTAL FOR DIMENSIONAL STONE	228	6 659	21	951
CHEMICAL PROCESS STONE				
CEMENT PLANTS,CANADIAN	921	3 904	5 937	7 066
FLUX IN IRON AND STEEL FURNACES	1 009	4 103	0	0
FLUX IN NON-FERROUS SMELTERS	0	0	1	684
GLASS FACTORIES	120	2 400	0	0
LIME PLANTS,CANADIAN	1 389	5 908	1 066	7 604
MG METAL PRODUCTION	0	0	0	0
PAINT BASE	6	110	0	0
PULP AND PAPER MILLS	0	0	0	0
SODA ASH	0	0	592	3 671
SUGAR REFINERIES	0	0	0	0
TOTAL FOR CHEMICAL PROCESS STONE	3 445	16 425	7 596	19 025
PULVERIZED STONE				
AGRICULTURAL PURPOSES AND FERTILIZER PLANTS	305	3 857	0	0
ASPHALT FILLER	57	187	0	0
CALCITE PRODUCTS	130	7 008	0	0
CARPET BACKING	15	241	0	0
DUSTING COAL MINES	0	0	0	0
MINE BACKFILL	0	0	478	1 732
SAND	0	2	0	0
WHITING	0	0	0	0
TOTAL FOR PULVERIZED STONE	507	11 295	478	1 732

* REFERS TO STONE SOLD AND CONSUMED BY STONE PRODUCERS.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

REPORT OF ALL STONE PRODUCTION
IN THE PROVINCE OF ONTARIO
1986

TYPE OF STONE	SOLD *		CONSUMED *	
	TONNES IN 000'S	$ VALUE IN 000'S	TONNES IN 000'S	$ VALUE IN 000'S
MISCELLANEOUS STONE				
ARMOUR STONE	74	553	0	0
BUILDING BRICK	0	0	163	618
CLAY TILE PRODUCTS	0	0	0	0
CRUSHED STONE FOR ARTIFICIAL STONE	0	0	0	0
DRAINAGE STONE	7	39	0	0
FILL	54	164	0	0
GABION	32	213	0	0
POULTRY GRIT	13	687	0	0
PRECAST AGGREGATE	0	55	0	0
RAW SHALE	33	23	0	0
ROOFING GRANULES	305	6 003	0	0
RUBBLE AND RIPRAP	391	1 613	0	0
SCREENINGS	63	197	0	0
STUCCO DASH	0	63	0	0
TERRAZZO CHIPS	2	304	0	0
TOTAL FOR MISCELLANEOUS STONE	974	9 914	163	618
CRUSHED STONE				
ARMOUR STONE	5	39	0	0
ASPHALT AGGREGATE	2 437	12 486	600	1 639
BRICK MANUFACTURING	0	0	789	3 129
BUILDINGS	196	603	0	0
CLAY TILE	0	0	23	17
CLEAR STONE	2	8	0	0
CONCRETE AGGREGATE	3 294	16 791	56	190
DOLOMITE	111	732	0	0
DRAINAGE STONE	1 704	8 589	0	0
FILL	881	2 755	0	0
MANUFACTURED SAND	45	336	0	0
PRIME ROCK	9	27	0	0
RAILROAD BALLAST	534	2 123	429	3 698
ROAD METAL	27 209	116 026	537	1 633
SEWERS	1 086	5 427	0	0
WINTER SAND	66	458	13	73
TOTAL FOR CRUSHED STONE	37 579	166 400	2 447	10 379
TOTAL	42 733	210 693	10 705	32 705

* REFERS TO STONE SOLD AND CONSUMED BY STONE PRODUCERS.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

REPORT OF ALL STONE PRODUCTION
IN THE PROVINCE OF ONTARIO
1985

TYPE OF STONE	SOLD * TONNES IN 000'S	SOLD * $ VALUE IN 000'S	CONSUMED * TONNES IN 000'S	CONSUMED * $ VALUE IN 000'S
DIMENSIONAL STONE				
BUILDING STONE,ROUGH	168	2 206	18	714
MONUMENTAL AND ORNAMENTAL STONE	3	93	0	0
OTHER(FLAGSTONE,ETC.)	13	766	0	0
TOTAL FOR DIMENSIONAL STONE	184	3 065	18	714
CHEMICAL PROCESS STONE				
CEMENT PLANTS,CANADIAN	241	743	5 577	8 330
FLUX IN IRON AND STEEL FURNACES	1 075	4 482	0	0
FLUX IN NON-FERROUS SMELTERS	0	0	1	724
GLASS FACTORIES	149	2 547	0	0
LIME PLANTS,CANADIAN	483	2 564	1 558	7 687
MG METAL PRODUCTION	2	12	107	642
PAINT BASE	4	61	0	0
PULP AND PAPER MILLS	0	0	0	0
SODA ASH PRODUCTION	0	0	548	4 501
SUGAR REFINERIES	0	0	0	0
TOTAL FOR CHEMICAL PROCESS STONE	1 954	10 409	7 791	21 884
PULVERIZED STONE				
AGRICULTURAL PURPOSES AND FERTILIZER PLANTS	264	3 814	0	0
ASPHALT FILLER	64	221	0	0
CALCITE PRODUCTS	129	6 934	0	0
CARPET BACKING	14	225	0	0
DUSTING COAL MINES	0	0	0	0
OTHER MINERAL FILLER	8	230	0	0
WHITING	0	0	0	0
TOTAL FOR PULVERIZED STONE	479	11 424	0	0
MISCELLANEOUS STONE				
ARMOUR & SURGE STONE	106	674	0	0
BRICK MANUFACTURE	0	0	810	1 158
BRICK MIX	2	43	0	0

* REFERS TO STONE SOLD AND CONSUMED BY STONE PRODUCERS.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

REPORT OF ALL STONE PRODUCTION
IN THE PROVINCE OF ONTARIO
1985

TYPE OF STONE	SOLD *		CONSUMED *	
	TONNES IN 000'S	$ VALUE IN 000'S	TONNES IN 000'S	$ VALUE IN 000'S
MISCELLANEOUS STONE				
CLAY TILE PRODUCTS	0	0	47	34
CLEARS, MISC.	296	1 277	0	0
CRUSHED STONE FOR ARTIFICIAL STONE	0	0	0	0
DECORATIVE STONE	0	8	0	0
GABION FILL	44	264	0	0
LANDFILL	37	129	0	0
MINE BACKFILL ROCK	0	0	618	1 841
POULTRY GRIT	2	156	0	0
PRECAST AGGREGATE	1	71	0	0
ROOFING GRANULES	520	22 833	0	0
RUBBLE AND RIPRAP	234	1 202	0	0
SCREENINGS	34	130	0	0
STUCCO DASH	1	85	0	0
TERRAZZO CHIPS	3	334	0	0
TOTAL FOR MISCELLANEOUS STONE	1 280	27 206	1 475	3 033
CRUSHED STONE				
3/4" & 8" CR. STONE	242	1 004	0	0
ASPHALT AGGREGATE	2 307	11 240	819	2 624
CLAY TILE PRODUCTS	0	0	47	34
CONCRETE AGGREGATE	2 691	12 191	499	2 109
DOLOMITE, MG.EXTRACT	2	12	107	642
GENERAL CONSTRUCTION	13 957	52 931	390	820
GOLF COURSE SAND	0	2	0	0
MANUFACTURED SAND	47	289	0	0
PRECAST CONCRETE	2	39	0	0
RAILROAD BALLAST	521	2 016	1 518	11 331
ROAD METAL	8 729	34 287	767	1 926
SPECIALTY AGGREGATE	28	434	0	0
TOTAL FOR CRUSHED STONE	28 526	114 445	4 147	19 486
TOTAL	32 423	166 549	13 431	45 117

* REFERS TO STONE SOLD AND CONSUMED BY STONE PRODUCERS.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

DIRECT COSTS OF THE ONTARIO MINERAL INDUSTRY

DIRECT COSTS OF THE ONTARIO MINERAL INDUSTRY

	TOTAL EMPLOYMENT	WAGES + SALARIES IN 000'S $	FUEL + ELECTRICITY IN 000'S $	PROCESS SUPPLIES IN 000'S $	TOTAL COST IN 000'S $
GOLD QUARTZ MINES					
1980	3 150	65 073	8 339	28 334	101 746
1981	3 438	77 224	9 936	29 776	116 936
1982	3 275	88 259	13 018	34 509	135 786
1983	3 578	98 283	15 921	39 801	154 005
1984	3 823	118 391	20 320	70 711	209 422
1985	3 599	118 310	25 271	72 368	215 948
1986	3 969	143 205	31 382	91 675	266 262
URANIUM MINES					
1980	4 848	114 952	24 507	73 859	213 319
1981	5 172	149 537	28 443	95 265	273 245
1982	4 860	174 803	36 455	108 663	319 922
1983	4 642	166 534	36 654	105 514	308 701
1984	4 937	190 398	44 263	114 267	348 928
1985	4 684	187 430	44 258	111 457	343 145
1986	4 303	181 864	41 018	102 545	325 427
IRON MINES					
1980	2 261	55 645	28 851	53 660	138 156
1981	2 168	58 824	33 425	63 871	156 121
1982	1 716	52 588	28 258	43 577	124 422
1983	1 512	53 604	29 409	38 699	121 713
1984	1 592	62 643	33 353	46 294	142 290
1985	1 476	57 715	33 881	48 945	140 540
1986	1 240	48 675	28 915	45 456	123 046
COPPER-GOLD-SILVER M					
1980	3 349	76 025	18 109	65 754	159 888
1981	3 427	89 399	22 747	81 159	193 305
1982	3 279	93 581	23 705	76 597	193 884
1983	2 947	90 227	23 834	68 849	182 910
1984	2 900	93 930	24 994	71 206	190 130
1985	2 676	90 566	26 525	74 917	192 008
1986	2 574	93 858	26 900	66 520	187 277

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

DIRECT COSTS OF THE ONTARIO MINERAL INDUSTRY

	TOTAL EMPLOYMENT	WAGES + SALARIES IN 000'S $	FUEL + ELECTRICITY IN 000'S $	PROCESS SUPPLIES IN 000'S $	TOTAL COST IN 000'S $
NICKEL-COPPER MINES					
1980	11 704	235 360	17 952	165 303	418 615
1981	11 384	250 900	19 452	183 758	454 110
1982	10 558	193 205	17 982	41 715	252 902
1983	8 515	197 680	29 986	80 425	308 091
1984	8 202	246 327	35 382	107 984	389 694
1985	7 338	246 904	39 228	119 804	405 936
1986	6 732	238 257	45 691	100 723	384 671
SILVER-COBALT MINES					
1980	237	4 619	463	1 458	6 539
1981	229	4 860	551	1 497	6 907
1982	195	5 361	672	1 826	7 859
1983	194	4 749	668	2 286	7 703
1984	184	4 526	752	2 565	7 844
1985	118	3 631	618	1 271	5 520
1986	104	3 037	448	1 105	4 591
PEAT BOG					
1980	42	360	20	178	558
1981	35	349	51	425	826
1982	33	364	34	169	567
1983	34	414	34	227	675
1984	35	435	35	199	668
1985	30	426	40	206	672
1986	30	443	34	261	738
GYPSUM MINES					
1980	165	2 304	1 027	2 392	5 723
1981	161	2 896	1 185	3 311	7 392
1982	126	2 456	1 172	2 166	5 795
1983	152	3 952	1 912	4 126	9 990
1984	184	4 992	2 270	5 450	12 712
1985	184	5 640	2 513	5 026	13 179
1986	215	7 015	2 939	6 221	16 175

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

DIRECT COSTS OF THE ONTARIO MINERAL INDUSTRY

	TOTAL EMPLOYMENT	WAGES + SALARIES IN 000'S $	FUEL + ELECTRICITY IN 000'S $	PROCESS SUPPLIES IN 000'S $	TOTAL COST IN 000'S $
TALC & SOAPSTONE M					
1980	59	923	560	555	2 038
1981	59	1 101	732	838	2 671
1982	70	1 439	870	1 051	3 360
1983	78	1 705	1 165	1 497	4 367
1984	91	2 045	1 402	1 753	5 200
1985	119	3 160	1 602	1 910	6 672
1986	115	3 414	1 568	1 947	6 929
FELDSPAR & QUARTZ M					
1980	331	5 736	1 980	2 501	10 218
1981	330	7 385	2 429	4 640	14 454
1982	290	7 699	2 407	5 036	15 142
1983	288	7 346	2 636	5 196	15 178
1984	263	7 124	2 799	5 254	15 177
1985	269	7 855	2 947	5 430	16 233
1986	270	8 072	2 834	5 026	15 933
SALT MINES					
1980	687	15 947	4 361	10 519	30 826
1981	706	17 361	5 204	12 640	35 206
1982	748	21 824	5 964	14 104	41 892
1983	773	25 042	7 209	14 315	46 566
1984	809	26 261	7 875	14 316	48 452
1985	727	26 413	8 175	16 078	50 666
1986	765	32 572	7 298	12 911	52 781
MISC. NON-METAL M					
1980	19	225	64	135	424
1981	35	580	62	140	782
1982	31	558	49	110	717
1983	28	560	56	123	739
1984	29	581	68	150	799
1985	32	652	105	193	950
1986	37	829	106	168	1 103

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

DIRECT COSTS OF THE ONTARIO MINERAL INDUSTRY

	TOTAL EMPLOYMENT	WAGES + SALARIES IN 000'S $	FUEL + ELECTRICITY IN 000'S $	PROCESS SUPPLIES IN 000'S $	TOTAL COST IN 000'S $
GRANITE QUARRIES					
1980	57	N/A	N/A	N/A	N/A
1981	138	2 599	1 109	3 602	7 310
1982	132	2 531	1 156	5 150	8 837
1983	155	3 536	1 484	5 423	10 443
1984	170	4 177	1 484	4 649	10 310
1985	148	N/A	N/A	N/A	N/A
1986	141	4 167	1 501	5 357	11 025
LIMESTONE QUARRIES					
1980	1 326	26 688	4 548	16 420	47 656
1981	1 317	23 469	8 383	23 162	55 014
1982	1 059	28 095	7 172	20 836	56 103
1983	1 002	21 647	7 001	15 921	44 569
1984	1 148	32 279	9 263	20 290	61 832
1985	1 165	36 412	43 420	37 076	116 908
1986	1 578	51 445	33 482	46 352	131 279
MARBLE QUARRIES					
1980	0	N/A	N/A	N/A	N/A
1981	4	N/A	N/A	N/A	N/A
1982	5	N/A	N/A	N/A	N/A
1983	4	N/A	N/A	N/A	N/A
1984	24	N/A	N/A	N/A	N/A
1985	1	N/A	N/A	N/A	N/A
1986	11	N/A	N/A	N/A	N/A
SANDSTONE QUARRIES					
1980	3	N/A	N/A	N/A	N/A
1981	4	N/A	N/A	N/A	N/A
1982	9	N/A	N/A	N/A	N/A
1983	11	N/A	N/A	N/A	N/A
1984	8	N/A	N/A	N/A	N/A
1985	3	N/A	N/A	N/A	N/A
1986	8	N/A	N/A	N/A	N/A

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

DIRECT COSTS OF THE ONTARIO MINERAL INDUSTRY

	TOTAL EMPLOYMENT	WAGES + SALARIES IN 000'S $	FUEL + ELECTRICITY IN 000'S $	PROCESS SUPPLIES IN 000'S $	TOTAL COST IN 000'S $
SHALE QUARRIES					
1980	2	N/A	N/A	N/A	N/A
1981	5	N/A	N/A	N/A	N/A
1982	3	N/A	N/A	N/A	N/A
1983	28	N/A	N/A	N/A	N/A
1984	26	N/A	N/A	N/A	N/A
1985	29	N/A	N/A	N/A	N/A
1986	36	N/A	N/A	N/A	N/A
SLATE QUARRIES					
1980	N/A	N/A	N/A	N/A	N/A
1981	N/A	N/A	N/A	N/A	N/A
1982	N/A	N/A	N/A	N/A	N/A
1983	N/A	N/A	N/A	N/A	N/A
1984	2	N/A	N/A	N/A	N/A
1985	2	N/A	N/A	N/A	N/A
1986	2	N/A	N/A	N/A	N/A
SAND AND GRAVEL PITS					
! 1980	1 090	17 465	5 473	12 707	35 645
! 1981	1 159	20 470	8 001	14 861	43 332
! 1982	916	18 499	7 069	10 779	36 347
! 1983	898	20 024	7 031	12 619	39 674
! 1984	728	18 179	7 149	10 822	36 149
! 1985	1 177	28 910	10 750	20 789	60 449
1986	2 233	64 622	13 472	31 782	109 876
SMELTING & REFINING					
1980	9 481	189 858	100 211	115 785	405 854
1981	9 347	211 664	113 556	101 297	426 517
1982	8 907	201 901	74 476	80 883	357 260
1983	7 989	208 509	92 520	82 742	383 771
1984	7 506	226 256	104 174	95 947	426 377
1985	7 004	223 106	111 201	112 084	446 391
1986	6 703	222 301	104 657	108 287	435 245

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

DIRECT COSTS OF THE ONTARIO MINERAL INDUSTRY

	TOTAL EMPLOYMENT	WAGES + SALARIES IN 000'S $	FUEL + ELECTRICITY IN 000'S $	PROCESS SUPPLIES IN 000'S $	TOTAL COST IN 000'S $
CLAY PRODUCTS MANUF.					
1980	1 158	20 106	9 733	9 072	38 911
1981	972	18 992	12 239	9 447	40 678
1982	770	15 900	10 540	7 340	33 780
1983	875	20 458	15 806	11 910	48 175
1984	936	21 104	17 307	13 221	51 632
1985	739	20 144	15 159	12 495	47 798
1986	682	21 200	16 687	13 527	51 414
CEMENT MANUFACTURERS					
1980	1 248	29 634	46 702	33 162	109 497
1981	1 244	34 896	51 387	33 436	119 719
1982	1 110	34 360	47 681	29 762	111 803
1983	1 130	35 203	45 230	31 802	112 235
1984	1 120	37 229	53 361	35 474	126 064
1985	1 060	38 464	66 130	45 768	150 362
1986	1 102	42 889	68 753	46 670	158 312
LIME MANUFACTURERS					
1980	534	10 921	23 989	9 360	44 270
1981	487	11 081	30 819	10 364	52 264
1982	458	11 865	28 030	10 067	49 962
1983	449	12 827	29 983	10 157	52 967
1984	469	14 232	32 172	11 639	58 042
1985	393	13 531	32 528	13 714	59 773
1986	430	15 931	27 664	12 679	56 274
GRAND TOTAL *					
1980	41 751	871 841	296 889	601 154	1 769 883
1981	41 821	983 587	349 711	673 489	2 006 789
1982	38 550	955 288	306 710	494 340	1 756 340
1983	35 282	972 300	348 539	531 632	1 852 472
1984	35 186	1 111 109	398 423	632 191	2 141 722
1985	32 973	1 109 269	464 351	699 531	2 273 150
1986	33 284	1 185 540	455 349	699 212	2 340 102

* TOTAL IS UNDERESTIMATED SINCE IT CONSIDERS N/A (NOT AVAILABLE) AS "0".

! EMPLOYMENT FOR SAND AND GRAVEL FROM 1980-1985 DOES NOT INCLUDE SMALL COMPANIES.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

FUEL AND ELECTRICITY USED IN THE ONTARIO MINING INDUSTRY

COST OF FUEL AND ELECTRICITY USED IN THE ONTARIO MINERAL INDUSTRY *

	COAL AND COKE	NATURAL GAS	MOTOR GASOLINE EX AVIATN	KEROSENE STOVE OIL NO.1	DIESEL OIL	LIGHT FUEL OIL NO.2 + 3	HEAVY FUEL OIL NO.4,5+6	LIQUIFIED PETROLEUM GASES	ELECRTICITY PURCHASED + SERVICE
					IN 000'S $				
GOLD QUARTZ MINES									
1980	31	676	89	6	363	393	0	221	6 561
1981	13	868	138	19	761	546	0	257	7 334
1982	18	1 113	383	222	879	744	1	417	9 229
1983	38	1 351	316	83	1 660	815	0	581	11 078
1984	42	1 169	602	155	3 147	803	0	598	13 804
1985	4	1 392	587	150	3 733	1 122	140	979	17 164
1986	5	1 671	442	230	3 623	812	247	2 663	21 690
URANIUM MINES									
1980	1 181	0	273	102	1 188	263	5 632	3 816	12 052
1981	31	0	387	132	2 063	324	8 781	3 853	12 872
1982	80	0	406	69	2 532	213	10 448	5 155	17 552
1983	44	0	412	42	2 337	165	10 886	4 232	18 536
1984	37	0	298	0	2 714	167	13 064	5 200	22 785
1985	19	2 831	347	0	2 850	101	10 590	2 897	24 623
1986	3	12 417	279	0	2 445	4	4	493	25 373
IRON MINES									
1980	2 416	7 118	324	0	3 131	527	1 206	100	14 028
1981	3 040	7 975	391	0	4 290	708	1 421	104	15 495
1982	2 355	6 539	366	0	3 219	764	1 034	145	13 835
1983	3 431	6 797	296	0	2 897	719	1 605	166	13 497
1984	2 958	7 522	266	0	3 567	677	1 984	295	16 084
1985	3 132	7 860	207	0	3 040	740	2 055	229	16 618
1986	2 687	7 231	126	0	2 171	629	1 920	213	13 937

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

COST OF FUEL AND ELECTRICITY USED IN THE ONTARIO MINERAL INDUSTRY *

	COAL AND COKE	NATURAL GAS	MOTOR GASOLINE EX AVIATN	KEROSENE STOVE OIL NO.1	DIESEL OIL	LIGHT FUEL OIL NO.2 + 3	HEAVY FUEL OIL NO.4,5+6	LIQUIFIED PETROLEUM GASES	ELECRTICITY PURCHASED + SERVICE
	IN 000'S $								
COPPER-GOLD-SILVER M									
1980	0	2 189	300	0	1 677	912	720	674	11 636
1981	0	2 613	429	217	2 373	1 073	865	1 591	13 585
1982	1	3 809	444	197	2 361	238	1 006	1 811	13 838
1983	0	4 288	413	164	2 092	411	1 017	1 376	14 073
1984	1	4 283	340	99	1 755	144	1 442	914	16 017
1985	1	4 421	346	110	2 123	132	1 021	1 090	17 282
1986	1	3 872	237	90	1 913	116	911	1 137	18 622
NICKEL-COPPER MINES									
1980	0	3 421	261	0	1 462	825	1 308	808	9 835
1981	0	4 091	321	1	1 766	758	1 212	1 104	10 127
1982	0	3 170	226	0	960	853	1 031	794	10 947
1983	0	3 363	369	2	2 051	556	1 196	359	22 074
1984	0	4 106	159	2	2 981	464	1 325	662	25 663
1985	0	5 536	386	1	3 068	586	178	120	29 332
1986	0	6 328	278	1	570	282	0	178	38 044
SILVER-COBALT MINES									
1980	0	0	38	2	3	97	0	0	323
1981	0	0	41	0	8	92	0	0	396
1982	0	0	42	0	35	57	24	0	515
1983	0	0	52	0	5	54	0	0	557
1984	0	0	81	0	5	68	0	0	598
1985	0	0	39	0	1	63	0	0	516
1986	0	0	44	0	2	4	0	0	398

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

COST OF FUEL AND ELECTRICITY USED IN THE ONTARIO MINERAL INDUSTRY *

	COAL AND COKE	NATURAL GAS	MOTOR GASOLINE EX AVIATN	KEROSENE STOVE OIL NO.1	DIESEL OIL	LIGHT FUEL OIL NO.2 + 3	HEAVY FUEL OIL NO.4,5+6	LIQUIFIED PETROLEUM GASES	ELECRTICITY PURCHASED + SERVICE
					IN 000'S $				
PEAT BOG									
1980	0	0	14	1	0	0	0	0	5
1981	0	20	23	0	0	0	0	0	8
1982	0	6	25	0	0	0	0	0	4
1983	0	0	30	0	0	0	0	0	4
1984	0	0	30	0	0	0	0	0	4
1985	0	0	35	0	0	0	0	0	5
1986	0	0	30	0	0	0	0	0	4
GYPSUM MINES									
1980	0	542	0	0	32	7	27	0	419
1981	0	626	0	0	48	0	0	11	500
1982	0	663	0	0	32	2	0	10	465
1983	0	1 179	0	0	48	0	0	6	679
1984	0	1 348	0	0	61	24	0	25	812
1985	0	1 468	0	0	43	41	0	13	948
1986	0	1 672	0	0	129	0	0	16	1 121
TALC & SOAPSTONE M									
1980	0	329	2	20	16	0	0	0	193
1981	0	432	3	24	13	0	0	0	260
1982	0	517	4	12	22	53	0	0	260
1983	0	716	6	19	42	51	0	0	331
1984	0	808	9	27	50	26	0	0	461
1985	0	905	7	28	35	42	0	0	565
1986	0	895	6	19	35	44	0	9	561

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

COST OF FUEL AND ELECTRICITY USED IN THE ONTARIO MINERAL INDUSTRY *

IN 000'S $

	COAL AND COKE	NATURAL GAS	MOTOR GASOLINE EX AVIATN	KEROSENE STOVE OIL NO.1	DIESEL OIL	LIGHT FUEL OIL NO.2 + 3	HEAVY FUEL OIL NO.4,5+6	LIQUIFIED PETROLEUM GASES	ELECRTICITY PURCHASED + SERVICE
FELDSPAR & QUARTZ M									
1980	0	154	57	0	230	407	0	9	1 124
1981	0	194	77	0	325	500	0	9	1 323
1982	0	232	63	0	258	531	0	12	1 311
1983	0	265	74	0	268	564	0	11	1 453
1984	0	255	82	0	287	562	0	15	1 598
1985	0	244	96	0	271	590	0	17	1 729
1986	0	211	88	0	258	499	0	15	1 762
SALT MINES									
1980	0	2 640	14	8	471	31	0	16	1 180
1981	0	3 363	8	32	502	2	0	20	1 277
1982	0	3 819	7	15	668	0	0	22	1 433
1983	0	4 551	5	2	671	0	0	24	1 956
1984	0	4 805	5	0	645	0	0	25	2 396
1985	0	4 817	5	0	728	0	0	24	2 601
1986	0	4 237	3	0	584	0	0	61	2 412
MISC. NON-METAL M									
1980	0	8	2	0	3	0	0	0	51
1981	0	7	0	0	10	0	0	0	45
1982	0	8	4	0	5	1	0	0	31
1983	0	4	3	0	7	0	0	0	42
1984	0	6	0	0	13	0	0	0	49
1985	0	12	1	0	15	0	0	0	76
1986	0	15	1	0	14	0	0	0	76

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

COST OF FUEL AND ELECTRICITY USED IN THE ONTARIO MINERAL INDUSTRY *

	COAL AND COKE	NATURAL GAS	MOTOR GASOLINE EX AVIATN	KEROSENE STOVE OIL NO.1	DIESEL OIL	LIGHT FUEL OIL NO.2 + 3	HEAVY FUEL OIL NO.4,5+6	LIQUIFIED PETROLEUM GASES	ELECRTICITY PURCHASED + SERVICE
					IN 000'S $				
GRANITE QUARRIES									
1980	0	0	0	0	0	0	0	0	0
1981	0	75	5	0	69	722	0	6	232
1982	0	668	6	0	93	117	0	0	271
1983	0	1 034	7	0	105	0	0	0	338
1984	0	1 008	10	0	115	0	0	0	352
1985	0	0	0	0	0	0	0	0	0
1986	0	847	9	0	187	0	0	0	458
LIMESTONE QUARRIES									
1980	0	126	261	89	1 770	273	122	25	1 607
1981	0	395	835	121	3 996	547	123	32	2 336
1982	0	639	583	90	3 407	275	45	41	2 091
1983	0	810	548	15	3 173	192	0	36	2 227
1984	0	670	610	144	4 455	363	0	56	2 965
1985	7 421	14 565	574	1	5 156	373	0	31	10 369
1986	8 633	4 287	625	277	5 871	456	6	42	11 422
MARBLE QUARRIES									
1980	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1981	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1982	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1983	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1984	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1985	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1986	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

COST OF FUEL AND ELECTRICITY USED IN THE ONTARIO MINERAL INDUSTRY *

	COAL AND COKE	NATURAL GAS	MOTOR GASOLINE EX AVIATN	KEROSENE STOVE OIL NO.1	DIESEL OIL	LIGHT FUEL OIL NO.2 + 3	HEAVY FUEL OIL NO.4,5+6	LIQUIFIED PETROLEUM GASES	ELECRTICITY PURCHASED + SERVICE
	IN 000'S $								
SANDSTONE QUARRIES									
1980	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1981	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1982	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1983	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1984	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1985	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1986	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SHALE QUARRIES									
1980	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1981	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1982	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1983	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1984	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1985	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1986	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SLATE QUARRIES									
1980	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1981	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1982	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1983	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1984	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1985	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1986	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

COST OF FUEL AND ELECTRICITY USED IN THE ONTARIO MINERAL INDUSTRY *

	COAL AND COKE	NATURAL GAS	MOTOR GASOLINE EX AVIATN	KEROSENE STOVE OIL NO.1	DIESEL OIL	LIGHT FUEL OIL NO.2 + 3	HEAVY FUEL OIL NO.4,5+6	LIQUIFIED PETROLEUM GASES	ELECRTICITY PURCHASED + SERVICE
	IN 000'S $								
SAND AND GRAVEL PITS									
1980	0	69	1 129	193	2 798	495	0	14	775
1981	0	250	1 239	142	4 966	350	84	15	977
1982	0	202	1 096	282	4 443	251	0	17	779
1983	0	259	782	134	4 324	474	102	41	915
1984	0	413	777	87	4 696	27	0	33	1 116
1985	0	631	1 040	131	7 001	363	230	42	1 305
1986	0	625	2 056	28	8 015	533	140	39	2 036
SMELTING & REFINING									
1980	0	29 375	277	24	86	1 221	18 589	83	50 464
1981	0	36 548	374	16	187	1 430	19 503	115	55 161
1982	0	28 694	46	0	95	3 506	11 314	143	29 714
1983	0	33 516	44	0	119	895	17 178	228	38 491
1984	0	37 502	84	0	147	1 491	17 658	257	49 595
1985	0	41 780	80	0	205	1 354	9 260	192	56 292
1986	0	38 145	28	0	188	1 262	2 358	141	60 696
CLAY PRODUCTS MANUF.									
1980	0	7 068	59	60	224	471	0	269	1 372
1981	0	9 138	140	7	309	593	0	89	1 944
1982	0	7 736	75	3	362	616	0	76	1 654
1983	0	12 248	85	2	470	686	0	104	2 194
1984	0	13 578	68	0	447	578	0	120	2 517
1985	0	12 041	56	0	444	127	0	101	1 813
1986	0	13 330	27	3	357	0	0	172	2 799

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

COST OF FUEL AND ELECTRICITY USED IN THE ONTARIO MINERAL INDUSTRY *

	COAL AND COKE	NATURAL GAS	MOTOR GASOLINE EX AVIATN	KEROSENE STOVE OIL NO.1	DIESEL OIL	LIGHT FUEL OIL NO.2 + 3	HEAVY FUEL OIL NO.4,5+6	LIQUIFIED PETROLEUM GASES	ELECRTICITY PURCHASED + SERVICE
	IN 000'S $								
CEMENT MANUFACTURERS									
1980	12 242	10 231	77	25	618	217	7 523	15	12 344
1981	18 688	10 849	100	1	939	375	6 334	19	14 033
1982	20 377	9 089	92	1	874	313	3 068	30	13 798
1983	19 286	7 545	86	1	582	296	2 768	55	14 439
1984	23 327	8 452	98	1	631	525	2 938	56	17 334
1985	31 166	8 799	89	1	676	226	4 411	58	20 704
1986	35 082	7 530	108	1	875	218	2 468	83	24 263
LIME MANUFACTURERS									
1980	2 348	11 085	31	1	138	18	5 399	0	1 614
1981	4 716	19 235	64	0	484	25	3 920	5	2 368
1982	5 633	17 238	74	0	614	27	2 258	6	2 182
1983	7 385	19 599	46	0	427	17	187	3	2 318
1984	7 547	20 716	45	0	322	29	1 031	5	2 478
1985	9 590	18 247	81	0	528	31	872	33	3 279
1986	8 327	14 776	74	0	608	44	324	61	3 450
GRAND TOTAL									
1980	18 218	75 031	3 208	531	14 210	6 157	40 526	6 050	125 583
1981	26 488	96 679	4 575	712	23 109	8 045	42 243	7 230	140 273
1982	28 464	84 142	3 942	891	20 859	8 561	30 229	8 679	119 909
1983	30 184	97 525	3 574	464	21 278	5 895	34 939	7 222	145 202
1984	33 912	106 641	3 564	515	26 038	5 948	39 442	8 261	176 628
1985	51 333	125 549	3 976	422	29 917	5 891	28 757	5 826	205 221
1986	54 738	118 089	4 461	649	27 845	4 903	8 378	5 323	229 124

* COST OF FUEL AND ELECTRICITY DOES NOT INCLUDE STEAM AND "OTHER" FUELS.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

FUEL AND ELECTRICITY USED IN THE ONTARIO MINERAL INDUSTRY

	COAL AND COKE	NATURAL GAS	MOTOR GASOLINE EX AVIATN	KEROSENE STOVE OIL NO.1	DIESEL OIL	LIGHT FUEL OIL NO.2 + 3	HEAVY FUEL OIL NO.4,5+6	LIQUIFIED PETROLEUM GASES	ELECRTICITY PURCHASED + SERVICE
					IN 000'S				
	TONNE	K CU M	LITRE	LITRE	LITRE	LITRE	LITRE	LITRE	1000 KWH
GOLD QUARTZ MINES									
1980	0	6	433	24	2 492	2 484	0	1 525	307
1981	0	7	361	57	2 452	2 486	0	1 433	294
1982	0	9	972	817	2 370	2 863	2	2 204	335
1983	0	9	703	207	5 476	2 938	0	2 330	371
1984	0	7	1 273	353	10 495	2 766	0	2 246	450
1985	0	8	1 152	333	11 497	3 144	782	3 992	511
1986	0	10	1 011	618	11 025	2 910	1 093	12 519	610
URANIUM MINES									
1980	15	0	1 103	618	6 721	1 643	41 267	31 398	598
1981	0	0	1 168	504	8 490	1 381	54 915	25 490	555
1982	1	0	1 051	251	9 147	849	59 014	30 395	697
1983	0	0	1 003	224	8 311	662	58 174	21 373	657
1984	0	0	723	0	8 855	878	62 750	24 523	755
1985	0	18	756	0	8 852	341	47 946	12 869	720
1986	0	78	650	0	8 566	15	21	2 028	763
IRON MINES									
1980	87	80	971	0	17 091	3 433	10 650	674	700
1981	93	76	1 276	0	17 917	3 601	10 372	518	699
1982	67	51	977	0	11 863	3 222	6 279	679	508
1983	85	47	740	0	10 153	2 863	8 672	655	475
1984	75	49	679	0	12 031	2 651	8 888	1 108	560
1985	79	53	513	0	9 489	2 525	9 220	839	531
1986	65	55	348	0	7 800	1 950	8 536	775	426

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

FUEL AND ELECTRICITY USED IN THE ONTARIO MINERAL INDUSTRY

	COAL AND COKE	NATURAL GAS	MOTOR GASOLINE EX AVIATN	KEROSENE STOVE OIL NO.1	DIESEL OIL	LIGHT FUEL OIL NO.2 + 3	HEAVY FUEL OIL NO.4,5+6	LIQUIFIED PETROLEUM GASES	ELECRTICITY PURCHASED + SERVICE
	IN 000'S								
	TONNE	K CU M	LITRE	LITRE	LITRE	LITRE	LITRE	LITRE	1000 KWH
COPPER-GOLD-SILVER M									
1980	0	22	845	0	8 645	6 151	5 395	4 324	569
1981	0	22	1 349	905	9 864	4 795	4 329	8 237	587
1982	0	28	1 170	728	8 406	942	5 138	8 209	551
1983	0	26	988	548	7 209	1 515	5 348	6 560	527
1984	0	26	787	355	5 985	477	5 329	4 153	557
1985	0	27	753	392	6 550	457	3 842	4 828	557
1986	0	27	550	318	6 448	440	5 055	6 520	566
NICKEL-COPPER MINES									
1980	0	38	1 029	2	8 258	3 123	10 365	5 813	477
1981	0	35	941	2	7 219	2 705	7 117	6 340	482
1982	0	24	646	2	3 412	3 516	5 812	4 429	367
1983	0	21	909	7	7 605	2 247	6 248	1 843	723
1984	0	25	395	5	9 675	1 706	6 128	3 342	913
1985	0	35	845	3	9 556	2 047	865	589	960
1986	0	42	626	1	1 911	963	0	767	1 167
SILVER-COBALT MINES									
1980	0	0	130	9	10	555	0	0	13
1981	0	0	122	1	23	384	0	0	13
1982	0	0	93	0	88	194	74	0	16
1983	0	0	108	0	13	163	0	0	15
1984	0	0	166	0	16	182	0	0	15
1985	0	0	78	0	1	160	0	0	11
1986	0	0	88	0	6	10	0	0	8

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

FUEL AND ELECTRICITY USED IN THE ONTARIO MINERAL INDUSTRY

	COAL AND COKE	NATURAL GAS	MOTOR GASOLINE EX AVIATN	KEROSENE STOVE OIL NO.1	DIESEL OIL	LIGHT FUEL OIL NO.2 + 3	HEAVY FUEL OIL NO.4,5+6	LIQUIFIED PETROLEUM GASES	ELECRTICITY PURCHASED + SERVICE
	IN 000'S								
	TONNE	K CU M	LITRE	LITRE	LITRE	LITRE	LITRE	LITRE	1000 KWH
PEAT BOG									
1980	0	0	69	5	3	0	0	0	0
1981	0	0	78	0	0	0	0	0	0
1982	0	0	68	0	0	0	0	0	0
1983	0	0	76	0	0	0	0	0	0
1984	0	0	61	0	0	0	0	0	0
1985	0	0	69	0	0	0	0	0	0
1986	0	0	67	0	0	0	0	0	0
GYPSUM MINES									
1980	0	7	0	0	177	45	224	0	19
1981	0	6	0	0	193	0	0	69	19
1982	0	6	0	0	114	10	0	44	16
1983	0	7	0	0	138	0	0	21	23
1984	0	8	0	0	188	87	0	86	26
1985	0	10	0	0	115	143	0	41	28
1986	0	10	0	0	381	0	0	70	32
TALC & SOAPSTONE M									
1980	0	4	9	111	62	0	0	0	8
1981	0	4	9	106	39	0	0	1	8
1982	0	4	11	38	58	234	0	0	9
1983	0	5	14	57	103	183	0	0	10
1984	0	5	20	79	85	76	0	0	12
1985	0	6	15	78	77	141	0	0	14
1986	0	5	16	52	36	75	0	35	14

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

FUEL AND ELECTRICITY USED IN THE ONTARIO MINERAL INDUSTRY

	COAL AND COKE	NATURAL GAS	MOTOR GASOLINE EX AVIATN	KEROSENE STOVE OIL NO.1	DIESEL OIL	LIGHT FUEL OIL NO.2 + 3	HEAVY FUEL OIL NO.4,5+6	LIQUIFIED PETROLEUM GASES	ELECRTICITY PURCHASED + SERVICE
	IN 000'S								
	TONNE	K CU M	LITRE	LITRE	LITRE	LITRE	LITRE	LITRE	1000 KWH
FELDSPAR & QUARTZ M									
1980	0	2	215	0	1 210	2 604	0	53	48
1981	0	2	232	0	1 229	2 350	0	45	51
1982	0	2	172	0	896	2 190	0	50	43
1983	0	2	197	0	958	2 289	0	42	44
1984	0	2	181	0	986	2 027	0	53	45
1985	0	2	204	0	846	2 022	0	55	44
1986	0	1	215	0	867	1 941	0	53	43
SALT MINES									
1980	0	33	61	55	2 048	191	0	116	45
1981	0	33	25	155	1 734	15	0	117	43
1982	0	29	20	55	2 143	0	0	115	44
1983	0	30	13	5	2 381	0	0	114	58
1984	0	30	12	0	2 205	0	0	118	67
1985	0	30	11	0	2 405	0	0	110	65
1986	0	31	9	0	2 134	0	0	244	57
MISC. NON-METAL M									
1980	0	0	8	0	14	0	0	1	2
1981	0	0	0	0	40	0	0	0	1
1982	0	0	10	0	16	4	0	0	1
1983	0	0	7	0	22	0	0	0	1
1984	0	0	0	0	37	0	0	0	1
1985	0	0	3	0	34	0	0	0	2
1986	0	0	2	1	34	0	0	1	2

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

FUEL AND ELECTRICITY USED IN THE ONTARIO MINERAL INDUSTRY

	COAL AND COKE	NATURAL GAS	MOTOR GASOLINE EX AVIATN	KEROSENE STOVE OIL NO.1	DIESEL OIL	LIGHT FUEL OIL NO.2 + 3	HEAVY FUEL OIL NO.4,5+6	LIQUIFIED PETROLEUM GASES	ELECRTICITY PURCHASED + SERVICE
					IN 000'S				
	TONNE	K CU M	LITRE	LITRE	LITRE	LITRE	LITRE	LITRE	1000 KWH
GRANITE QUARRIES									
1980	0	0	0	0	0	0	0	0	0
1981	0	1	21	0	278	3 627	0	34	8
1982	0	4	20	0	333	526	0	0	8
1983	0	6	22	0	367	0	0	0	10
1984	0	6	23	0	370	0	0	0	9
1985	0	0	0	0	0	0	0	0	0
1986	0	5	27	0	505	0	0	0	11
LIMESTONE QUARRIES									
1980	0	1	1 139	556	9 884	1 568	1 294	39	48
1981	0	3	2 703	534	16 124	2 378	439	156	56
1982	0	5	1 627	387	12 271	1 131	226	178	59
1983	0	5	1 607	62	11 359	769	0	136	61
1984	0	4	1 530	488	15 029	1 298	0	212	74
1985	115	86	1 261	2	15 801	1 341	0	163	279
1986	151	30	1 641	991	19 219	1 719	19	208	297
MARBLE QUARRIES									
1980	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1981	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1982	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1983	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1984	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1985	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1986	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

FUEL AND ELECTRICITY USED IN THE ONTARIO MINERAL INDUSTRY

	COAL AND COKE	NATURAL GAS	MOTOR GASOLINE EX AVIATN	KEROSENE STOVE OIL NO.1	DIESEL OIL	LIGHT FUEL OIL NO.2 + 3	HEAVY FUEL OIL NO.4,5+6	LIQUIFIED PETROLEUM GASES	ELECRTICITY PURCHASED + SERVICE
	IN 000'S								
	TONNE	K CU M	LITRE	LITRE	LITRE	LITRE	LITRE	LITRE	1000 KWH
SANDSTONE QUARRIES									
1980	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1981	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1982	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1983	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1984	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1985	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1986	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SHALE QUARRIES									
1980	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1981	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1982	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1983	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1984	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1985	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1986	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SLATE QUARRIES									
1980	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1981	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1982	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1983	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1984	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1985	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1986	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

FUEL AND ELECTRICITY USED IN THE ONTARIO MINERAL INDUSTRY

	COAL AND COKE	NATURAL GAS	MOTOR GASOLINE EX AVIATN	KEROSENE STOVE OIL NO.1	DIESEL OIL	LIGHT FUEL OIL NO.2 + 3	HEAVY FUEL OIL NO.4,5+6	LIQUIFIED PETROLEUM GASES	ELECRTICITY PURCHASED + SERVICE
					IN 000'S				
	TONNE	K CU M	LITRE	LITRE	LITRE	LITRE	LITRE	LITRE	1000 KWH
SAND AND GRAVEL PITS									
1980	0	1	4 090	1 077	12 864	2 590	0	40	18
1981	0	4	4 119	596	18 187	1 568	442	66	22
1982	0	2	3 113	915	14 360	1 102	0	79	24
1983	0	1	1 900	638	12 754	1 581	508	179	24
1984	0	2	1 914	428	13 791	92	0	133	23
1985	0	4	2 327	429	18 380	1 261	887	198	21
1986	0	4	5 179	87	23 891	2 520	767	157	38
SMELTING & REFINING									
1980	0	332	1 161	84	569	11 809	165 313	647	3 151
1981	0	321	1 152	43	598	7 744	129 517	687	2 422
1982	0	227	125	0	320	14 444	68 693	818	1 180
1983	0	220	118	0	407	3 541	86 557	1 026	1 411
1984	0	236	200	0	482	5 415	84 517	1 173	1 746
1985	0	285	180	0	620	4 629	40 846	810	1 771
1986	0	286	70	0	649	4 419	15 985	578	1 905
CLAY PRODUCTS MANUF.									
1980	0	82	959	1 697	4 115	7 572	0	1 234	45
1981	0	76	431	36	1 097	2 812	0	434	62
1982	0	53	200	18	1 029	2 574	0	340	46
1983	0	77	198	8	1 343	2 823	0	431	59
1984	0	101	155	79	1 992	1 245	0	495	64
1985	0	78	121	0	1 121	489	0	432	45
1986	0	91	57	9	972	0	0	656	62

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

FUEL AND ELECTRICITY USED IN THE ONTARIO MINERAL INDUSTRY

	COAL AND COKE	NATURAL GAS	MOTOR GASOLINE EX AVIATN	KEROSENE STOVE OIL NO.1	DIESEL OIL	LIGHT FUEL OIL NO.2 + 3	HEAVY FUEL OIL NO.4,5+6	LIQUIFIED PETROLEUM GASES	ELECRTICITY PURCHASED + SERVICE
					IN 000'S				
	TONNE	K CU M	LITRE	LITRE	LITRE	LITRE	LITRE	LITRE	1000 KWH
CEMENT MANUFACTURERS									
1980	299	126	334	170	3 481	1 434	76 216	85	566
1981	426	101	333	5	4 072	1 670	48 060	78	575
1982	400	68	263	3	3 082	1 318	19 185	111	496
1983	382	54	225	3	2 184	1 196	15 585	199	498
1984	453	60	238	2	2 232	1 916	14 788	190	552
1985	561	57	204	2	2 145	857	17 060	289	612
1986	621	52	248	2	2 736	853	19 381	351	711
LIME MANUFACTURERS									
1980	45	129	149	3	784	110	53 106	0	68
1981	70	165	222	0	2 089	115	29 243	32	93
1982	79	121	218	0	1 944	106	12 542	26	68
1983	107	119	135	0	1 566	68	1 027	14	68
1984	103	126	123	0	1 125	88	4 282	17	65
1985	123	112	199	0	1 735	105	3 355	92	88
1986	119	111	169	0	1 895	195	2 391	226	87
GRAND TOTAL									
1980	446	863	12 705	4 411	78 428	45 312	363 830	45 949	6 786
1981	589	856	14 542	2 944	91 645	37 631	284 434	43 737	6 097
1982	547	633	10 756	3 214	71 852	35 225	176 965	47 677	4 576
1983	574	629	8 963	1 759	72 349	22 838	182 119	34 923	5 141
1984	631	687	8 480	1 789	85 579	20 904	186 682	37 849	6 042
1985	878	811	8 691	1 239	89 224	19 662	124 803	25 307	6 365
1986	956	838	10 973	2 079	89 075	18 010	53 248	25 188	6 905

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

EXPLORATION, DEVELOPMENT AND PRODUCTION IN THE ONTARIO MINERAL INDUSTRY

EXPLORATION, DEVELOPMENT AND PRODUCTION WORK IN THE ONTARIO MINERAL INDUSTRY

	EXPLORATION DIAMOND DRILLING	DRILLING FOR ORE & WASTE ROCK	SHAFTS	DECLINES AND ADITS	RAISES AND WINZES	DRIFTS AND CROSSCUTS
			IN METRES			
GOLD QUARTZ MINES						
1980	72 605	1 732 927	0	65	4 946	11 424
1981	106 203	2 082 729	0	122	6 705	16 026
1982	97 899	2 270 752	24 144	850	7 550	20 258
1983	121 792	2 605 984	38 427	410	6 509	16 459
1984	139 539	2 213 786	33 934	683	6 331	16 754
1985	108 598	2 748 397	2 106	2 096	8 339	27 714
1986	191 517	2 959 444	1 557	2 480	22 114	34 663
URANIUM MINES						
1980	55 385	5 850 397	0	6 780	8 970	36 490
1981	57 334	4 099 021	0	5 691	1 844	36 568
1982	52 343	7 342 400	0	2 713	7 674	69 773
1983	40 984	5 448 638	0	1 130	6 895	59 947
1984	50 527	8 475 054	0	1 139	7 861	61 116
1985	41 659	8 161 099	0	1 899	9 623	68 929
1986	37 661	8 015 155	0	0	8 368	72 577
IRON MINES						
1980	0	430 086	3 635	2 598	799	31
1981	11 208	433 150	4 689	2 743	542	0
1982	9 139	312 124	3 529	1 504	562	0
1983	32	236 025	2 531	866	433	0
1984	660	372 230	3 302	1 034	512	0
1985	5 295	292 674	2 889	382	552	0
1986	0	267 264	3 426	340	455	0
COPPER-GOLD-SILVER M						
1980	74 535	1 287 495	1	1 701	7 066	15 559
1981	74 159	1 632 800	94	2 238	7 326	20 241
1982	50 918	1 349 811	488	447	7 430	20 799
1983	64 760	1 161 428	3	845	6 652	19 563
1984	100 530	1 108 136	325	89	8 710	22 856
1985	59 848	1 159 451	517	2	8 800	24 028
1986	75 250	1 082 367	0	488	6 830	21 552

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

EXPLORATION, DEVELOPMENT AND PRODUCTION WORK IN THE ONTARIO MINERAL INDUSTRY

	EXPLORATION DIAMOND DRILLING	DRILLING FOR ORE & WASTE ROCK	SHAFTS	DECLINES AND ADITS	RAISES AND WINZES	DRIFTS AND CROSSCUTS
			IN METRES			
NICKEL-COPPER MINES						
1980	140 651	10 157 142	582	5 953	7 066	29 499
1981	139 186	9 553 242	0	6 913	4 316	27 565
1982	81 651	4 498 125	0	3 196	1 956	12 765
1983	62 739	5 543 192	0	4 246	2 154	31 460
1984	105 806	7 284 273	258	5 425	4 805	57 536
1985	99 387	7 633 473	316	7 074	3 948	56 355
1986	99 430	5 596 374	0	7 770	3 917	39 289
SILVER-COBALT MINES						
1980	11 088	207 360	0	0	293	1 328
1981	21 329	172 528	0	0	257	1 376
1982	24 535	161 097	0	0	438	2 246
1983	38 453	158 959	0	0	853	1 177
1984	37 389	181 625	0	0	654	2 288
1985	30 469	93 713	0	0	360	992
1986	32 947	75 430	0	0	301	1 003
GYPSUM MINES						
1980	430	83 045	0	0	0	0
1981	0	113 891	0	0	0	0
1982	0	175 000	0	0	0	0
1983	762	361 812	0	0	0	0
1984	469	786 574	0	0	0	0
1985	521	731 520	0	0	0	0
1986	0	1 822 518	0	0	0	0
TALC & SOAPSTONE M						
1980	0	0	0	0	16	31
1981	1 327	0	0	40	0	0
1982	3 123	0	0	0	0	14
1983	28	1 050	0	0	0	21
1984	1 646	1 100	0	0	0	61
1985	0	0	0	0	0	0
1986	0	0	0	0	0	0

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

EXPLORATION, DEVELOPMENT AND PRODUCTION WORK IN THE ONTARIO MINERAL INDUSTRY

	EXPLORATION DIAMOND DRILLING	DRILLING FOR ORE & WASTE ROCK	SHAFTS	DECLINES AND ADITS	RAISES AND WINZES	DRIFTS AND CROSSCUTS
			IN METRES			
FELDSPAR & QUARTZ M						
1980	798	76 723	0	0	0	0
1981	1 008	98 070	0	0	0	0
1982	0	48 755	0	0	0	0
1983	183	60 307	0	0	0	0
1984	2 347	112 092	0	0	0	0
1985	1 064	61 670	0	0	0	0
1986	0	72 339	0	0	0	0
SALT MINES						
1980	0	4	0	0	0	0
1981	0	0	0	0	0	0
1982	0	9	0	0	0	0
1983	0	0	0	0	0	0
1984	0	0	0	0	0	0
1985	0	0	0	0	0	0
1986	0	0	0	0	0	0
MISC. NON-METAL M						
1980	0	0	0	0	0	0
1981	355	732	0	457	0	0
1982	0	406	0	0	0	0
1983	0	700	0	0	0	0
1984	0	500	0	0	0	0
1985	0	400	0	0	0	0
1986	0	0	0	0	0	0

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

EXPLORATION, DEVELOPMENT AND PRODUCTION WORK IN THE ONTARIO MINERAL INDUSTRY

	EXPLORATION DIAMOND DRILLING	DRILLING FOR ORE & WASTE ROCK	SHAFTS	DECLINES AND ADITS	RAISES AND WINZES	DRIFTS AND CROSSCUTS
			IN METRES			
GRAND TOTAL						
1980	355 492	19 825 179	4 218	17 097	29 156	94 362
1981	412 109	18 186 163	4 783	18 204	20 990	101 776
1982	319 608	16 158 479	28 161	8 710	25 610	125 855
1983	329 733	15 578 095	40 961	7 497	23 496	128 627
1984	438 913	20 535 370	37 819	8 370	28 873	160 611
1985	346 841	20 882 397	5 828	11 453	31 622	178 018
1986	436 805	19 890 891	4 983	11 078	41 985	169 084

NOTE: EXPLORATION DIAMOND DRILLING INCLUDE "ON PROPERTY" EXPLORATION, TESTING AND ORE OUTLINE DRILLING.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

COST OF ALL PHYSICAL WORK AND SURVEYS PERFORMED IN THE PROVINCE OF ONTARIO
1986

OUTSIDE OR GENERAL EXPLORATION

TYPE OF MINERAL SOUGHT	DIAMOND DRILLING $	GEO-CHEMICAL $	GEOLOGY $	GEO-PHYSICAL $	AIRBORNE GEOPHYSICAL $	ROCK WORKS $	OTHER WORKS $	TOTAL $
GOLD ONLY	40 072 002	3 253 348	7 168 669	3 829 784	807 264	11 672 468	11 068 085	77 871 620
GOLD & OTHER METALS (INCL.SILVER)	2 828 138	626 996	499 267	201 954	64 794	88 170	1 098 500	5 407 819
SILVER ONLY	1 115 724	17 350	30 610	11 500	0	19 237	68 454	1 262 875
SILVER & OTHER METALS (EXCL.GOLD)	682 804	826	0	67 940	48 153	0	113 793	913 516
BASE METALS	4 866 586	151 028	873 983	398 946	35 650	724	459 659	6 786 576
URANIUM	0	0	5 903	0	0	0	4 515	10 418
NON-METALS	637 667	43 860	381 528	50 877	0	185 656	451 410	1 750 998
PLATINUM GROUP METALS	741 724	177 127	749 656	113 087	45 760	3 500	794 937	2 625 791
DIAMONDS	14 841	818 193	8 163	0	0	0	323 738	1 164 935
CHROMIUM,LITHIUM,TUNGSTEN	67 319	1 500	0	0	0	2 000	54 475	125 294
VARIOUS	152 092	85 821	633 140	39 768	0	0	649 281	1 560 102
TOTAL:	51 178 897	5 176 049	10 350 919	4 713 856	1 001 621	11 971 755	15 086 847	99 479 944
MINE OR ON-PROPERTY EXPLORATION								
GOLD ONLY	4 021 642	366 621	510 897	128 785	0	2 209 573	7 764 075	15 001 593
GOLD & OTHER METALS (INCL.SILVER)	687 330	0	0	0	0	101 378	0	788 708
SILVER ONLY	2 216 498	0	6 000	0	0	969 996	60 000	3 252 494
SILVER & OTHER METALS	308 751	0	0	0	0	1 945 025	0	2 253 776
BASE METALS	2 475 202	200	3 400	6 700	0	475 079	82 195	3 042 776
CALCITE	29 040	2 200	3 500	0	0	0	11 500	46 240
TOTAL:	9 738 463	369 021	523 797	135 485	0	5 701 051	7 917 770	24 385 587

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

COST OF ALL PHYSICAL WORK AND SURVEYS
PERFORMED IN THE PROVINCE OF ONTARIO
1986

MINE OR ON-PROPERTY DEVELOPMENT

	DIAMOND DRILLING $	SHAFT $	DRIFTS CROSS-CUTS $	RAISES DECLINES $	STRIPPING $	OTHER WORKS $	TOTAL $
GOLD ONLY	4 269 899	8 428 878	36 915 141	7 819 699	1 713 304	6 680 103	65 827 024
SILVER ONLY	0	200 000	1 353 943	2 224 740	0	100 234	3 878 917
SILVER & OTHER METALS	0	0	2 603 300	1 278 030	0	0	3 881 330
BASE METALS	2 892 419	882 514	29 876 962	11 353 124	110 473	40 575 883	85 691 375
URANIUM	1 257 309	0	52 906 635	7 682 651	0	0	61 846 595
IRON	354 924	0	1 422 088	538 601	9 953 281	97 592	12 366 486
NON-METALS	400	0	0	0	49 761	506 023	556 184
TOTAL:	8 774 951	9 511 392	125 078 069	30 896 845	11 826 819	47 959 835	234 047 911
GRAND TOTAL:							357 913 442

TOTALS OF EXPLORATION AND DEVELOPMENT COSTS

DIAMOND DRILLING	$ 69 692 311
GEOCHEMICAL	5 545 070
GEOLOGY	10 874 716
GEOPHYSICAL	4 849 341
AIRBORNE GEOPHYSICAL	1 001 621
ROCK WORKS	17 672 806
SHAFT	9 511 392
DRIFTS AND CROSSCUTS	125 078 069
RAISES AND DECLINES	30 896 845
STRIPPING	11 826 819
OTHER WORKS	70 964 452
GRAND TOTAL	$ 357 913 442

NOTE: THIS REPORT IS BASED ON 75% RESPONSE RATE.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

COST OF ALL PHYSICAL WORK AND SURVEYS PERFORMED IN THE PROVINCE OF ONTARIO

1985

OUTSIDE OR GENERAL EXPLORATION

TYPE OF MINERAL SOUGHT	DIAMOND DRILLING $	GEO-CHEMICAL $	GEOLOGY $	GEO-PHYSICAL $	AIRBORNE GEOPHYSICAL $	ROCK WORKS $	OTHER WORKS $	TOTAL $
GOLD ONLY	25 208 640	2 533 583	6 424 382	3 879 693	550 689	6 003 629	9 531 993	54 132 609
GOLD & OTHER METALS (INCL.SILVER)	5 878 022	1 805 978	2 139 630	918 580	59 773	2 634 367	2 771 137	16 207 487
SILVER ONLY	243 655	5 133	16 321	10 111	0	905	13 216	289 341
SILVER & OTHER METALS (EXCL.GOLD)	1 065 213	113 115	422 856	240 953	0	36 880	492 940	2 371 957
BASE METALS	3 141 186	331 447	841 841	854 802	120 298	39 210	474 961	5 803 745
URANIUM	0	0	0	0	0	0	442	442
NON-METALS	390 937	92 513	158 075	1 553	0	53 728	117 147	813 953
PLATINUM GROUP METALS	151 134	20 108	66 962	16 166	0	48 736	151 256	454 362
DIAMONDS	67 058	652 601	18 299	28 665	0	0	335 907	1 102 530
TUNGSTEN	30 451	0	2 688	0	0	0	1 435	34 574
TITANIUM	125 645	0	2 000	3 000	4 000	0	0	134 645
NIOBIUM	0	1 264	32 285	0	0	0	0	33 549
TOTAL:	36 301 941	5 555 742	10 125 339	5 953 523	734 760	8 817 455	13 890 434	81 379 194

MINE OR ON-PROPERTY EXPLORATION

TYPE OF MINERAL SOUGHT	DIAMOND DRILLING $	GEO-CHEMICAL $	GEOLOGY $	GEO-PHYSICAL $	AIRBORNE GEOPHYSICAL $	ROCK WORKS $	OTHER WORKS $	TOTAL $
GOLD ONLY	2 392 599	41 742	106 233	27 204	0	585 687	531 352	3 684 817
GOLD & OTHER METALS (INCL.SILVER)	289 470	0	30 000	0	0	2 181 991	1 674	2 503 135
SILVER ONLY	890 096	24 120	5 691	0	0	0	17 150	937 057
BASE METALS	3 510 948	3 100	6 700	25 400	0	1 127 284	10 200	4 683 632
NON METALS	84 042	15 000	0	0	0	0	10 000	109 042
TOTAL:	7 167 155	83 962	148 624	52 604	0	3 894 962	570 376	11 917 683

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

COST OF ALL PHYSICAL WORK AND SURVEYS PERFORMED IN THE PROVINCE OF ONTARIO
1985

MINE OR ON-PROPERTY DEVELOPMENT

	DIAMOND DRILLING $	SHAFT $	DRIFTS CROSS-CUTS $	RAISES DECLINES $	STRIPPING $	OTHER WORKS $	TOTAL $
GOLD ONLY	4 150 560	29 431 349	22 015 106	12 118 758	250 000	4 912 528	72 878 301
GOLD & OTHER METALS (INCL. SILVER)	300 749	0	5 653 335	1 847 655	0	0	7 801 739
SILVER ONLY	173 794	0	16 513	1 114 504	0	80 903	1 385 714
BASE METALS	1 826 702	2 121 553	15 313 138	3 980 335	12 982 858	17 561 255	53 785 841
URANIUM	963 547	0	39 856 959	10 558 372	0	3 891 753	55 270 631
NON-METALS	15 000	0	0	0	53 361	27 000	95 361
TOTAL:	7 430 352	31 552 902	82 855 051	29 619 624	13 286 219	26 473 439	191 217 587
GRAND TOTAL:							284 514 464

TOTALS OF EXPLORATION AND DEVELOPMENT COSTS

DIAMOND DRILLING	$ 50 899 448
GEOCHEMICAL	5 639 704
GEOLOGY	10 273 963
GEOPHYSICAL	6 006 127
AIRBORNE GEOPHYSICAL	734 760
ROCK WORKS	12 712 417
SHAFT	31 552 902
DRIFTS AND CROSSCUTS	82 855 051
RAISES AND DECLINES	29 619 624
STRIPPING	13 286 219
OTHER WORKS	40 934 249
GRAND TOTAL	$ 284 514 464

NOTE: THIS REPORT IS BASED ON 55% RESPONSE RATE.

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

MINING CLAIMS
PROSPECTORS' LICENCES
AND ASSESSMENT WORK

MINING CLAIMS AND PROSPECTORS' LICENCES IN ONTARIO

YEAR	MINING DIVISION	MINING CLAIMS RECORDED	MINING CLAIMS CANCELLED	MINING CLAIMS GOOD STANDING	PROSPECTORS' LICENCES ISSUED	PROSPECTORS' LICENCES RENEWED
1980	EASTERN ONTARIO	548	721	1 699	737	1 011
	KENORA	1 877	788	3 208	89	54
	LARDER LAKE	6 299	1 834	12 622	271	275
	PATRICIA	3 485	1 391	7 068	49	49
	PORCUPINE	10 742	1 778	18 753	273	268
	RED LAKE	2 220	1 115	4 301	62	75
	SAULT STE MARIE	1 254	1 059	2 465	101	80
	SUDBURY	1 948	737	3 569	180	168
	THUNDER BAY	5 527	1 836	11 245	291	283
	ONTARIO TOTAL	33 900	11 259	64 930	2 053	2 263
1981	EASTERN ONTARIO	485	758	1 531	639	1 115
	KENORA	2 121	846	4 076	83	83
	LARDER LAKE	5 498	2 697	15 423	244	295
	PATRICIA	2 861	1 582	8 303	72	47
	PORCUPINE	8 934	2 956	24 731	271	308
	RED LAKE	1 719	1 249	4 889	64	96
	SAULT STE MARIE	1 474	830	3 109	67	91
	SUDBURY	3 087	650	6 116	202	189
	THUNDER BAY	6 844	4 426	13 663	263	231
	ONTARIO TOTAL	33 023	15 994	81 841	1 905	2 455
1982	EASTERN ONTARIO	354	617	1 115	572	1 230
	KENORA	1 579	1 609	4 046	64	78
	LARDER LAKE	3 253	5 218	13 458	185	303
	PATRICIA	842	1 766	7 737	34	37
	PORCUPINE	5 420	6 457	23 694	216	307
	RED LAKE	942	1 884	3 922	50	83
	SAULT STE MARIE	10 027	1 432	11 704	64	87
	SUDBURY	671	2 577	4 182	178	241
	THUNDER BAY	10 252	4 613	19 349	188	356
	ONTARIO TOTAL	33 340	26 173	89 207	1 551	2 722
1983	EASTERN ONTARIO	391	377	1 157	969	1 414
	KENORA	11 061	1 472	13 637	205	107
	LARDER LAKE	8 354	3 866	17 946	214	375
	PATRICIA	4 395	1 164	10 319	67	63
	PORCUPINE	11 859	4 967	30 586	311	343
	RED LAKE	2 413	1 204	5 130	47	76
	SAULT STE MARIE	14 745	754	25 695	172	210
	SUDBURY	1 261	805	4 439	252	238
	THUNDER BAY	15 835	1 537	33 721	425	316
	ONTARIO TOTAL	70 314	16 146	142 630	2 662	3 142

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

MINING CLAIMS AND PROSPECTORS' LICENCES IN ONTARIO

YEAR	MINING DIVISION	MINING CLAIMS RECORDED	MINING CLAIMS CANCELLED	MINING CLAIMS GOOD STANDING	PROSPECTORS' LICENCES ISSUED	PROSPECTORS' LICENCES RENEWED
1984	EASTERN ONTARIO	555	498	1 254	731	1 696
	KENORA	3 261	3 042	13 854	129	132
	LARDER LAKE	7 943	4 492	21 397	208	352
	PATRICIA	5 009	4 074	10 625	67	56
	PORCUPINE	7 633	11 040	27 179	269	393
	RED LAKE	4 344	1 725	7 799	59	87
	SAULT STE MARIE	1 786	6 642	20 839	98	118
	SUDBURY	1 451	1 520	4 508	234	252
	THUNDER BAY	8 389	7 206	34 904	332	451
	ONTARIO TOTAL	40 371	40 239	142 359	2 127	3 537
1985	EASTERN ONTARIO	457	360	1 312	534	1 731
	KENORA	2 216	5 195	10 875	93	123
	LARDER LAKE	7 588	5 011	23 974	157	335
	PATRICIA	2 513	3 972	9 051	38	58
	PORCUPINE	6 052	10 024	23 207	219	355
	RED LAKE	2 673	2 260	8 212	67	65
	SAULT STE MARIE	1 645	5 229	17 496	66	136
	SUDBURY	1 079	1 297	4 358	188	240
	THUNDER BAY	4 353	10 222	29 285	251	393
	ONTARIO TOTAL	28 576	43 570	127 770	1 613	3 436
1986	EASTERN ONTARIO	744	426	1 579	563	1 551
	KENORA	4 041	5 054	9 863	72	113
	LARDER LAKE	6 973	6 787	24 163	213	303
	PATRICIA	7 815	3 046	13 913	58	88
	PORCUPINE	17 889	8 689	33 181	254	355
	RED LAKE	3 803	1 598	10 427	53	66
	SAULT STE MARIE	2 149	13 883	7 185	72	103
	SUDBURY	1 191	1 171	4 396	209	225
	THUNDER BAY	15 959	13 900	32 097	377	466
	ONTARIO TOTAL	60 564	54 554	136 804	1 871	3 270
1987	KENORA	5 211	2 578	12 496	94	139
	LARDER LAKE	6 742	3 854	27 146	226	303
	PATRICIA	5 540	1 918	18 786	64	65
	PORCUPINE	8 934	4 402	38 318	249	402
	RED LAKE	4 512	1 702	11 017	95	67
	SAULT STE MARIE	4 880	2 030	12 172	75	95
	SOUTHERN ONT	619	526	1 641	643	1 573
	SUDBURY	5 777	720	9 358	256	303
	THUNDER BAY	16 269	7 712	41 568	438	517
	ONTARIO TOTAL	58 484	25 442	172 502	2 140	3 464

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

ASSESSMENT WORK RECORDED (IN DAYS)

YEAR	MINING DIVISION	MANUAL LABOUR	DIAMOND DRILLING	GEO- PHYSICAL SURVEYS	GEO- CHEMICAL SURVEYS	GEO- LOGICAL SURVEYS	LAND SURVEYS	POWER EQUIPMENT	BULLDOZER	ASSAYING	OTHER
1980	EASTERN ONTARIO	892	17 648	6 665	171	2 822	0	1 835	120	99	467
	KENORA	892	15 428	3 149	36	859	12	382	502	0	108
	LARDER LAKE	3 819	64 454	115 031	388	10 981	880	5 934	1 345	50	6 476
	PATRICIA	217	42 633	13 524	1 052	2 706	10 800	182	0	36	546
	PORCUPINE	7 447	59 993	212 208	0	5 246	470	4 308	369	482	6 329
	RED LAKE	495	38 482	30 240	0	871	560	385	288	0	654
	SAULT STE MARIE	260	7 099	4 430	0	1 496	2	186	693	9	1 245
	SUDBURY	203	7 008	5 848	280	1 020	360	759	2 326	0	5 093
	THUNDER BAY	722	53 418	57 483	6 923	5 372	80	1 006	1 135	0	1 149
	ONTARIO TOTAL	14 947	306 163	448 578	8 850	31 373	13 164	14 977	6 778	676	22 067
1981	EASTERN ONTARIO	333	11 855	4 041	564	4 022	120	2 601	220	38	823
	KENORA	490	26 127	37 624	203	3 383	200	859	1 720	4	2 122
	LARDER LAKE	2 264	69 906	125 459	210	19 536	2 360	9 677	1 141	322	16 212
	PATRICIA	10	42 588	232 184	614	4 866	5 720	133	1 449	0	72
	PORCUPINE	1 609	114 823	261 301	904	23 177	3 110	11 549	4 569	483	50 302
	RED LAKE	346	28 657	63 454	0	8 183	2 360	420	0	0	3 452
	SAULT STE MARIE	430	18 338	16 585	860	1 900	17	2 878	457	87	2 321
	SUDBURY	404	20 452	42 466	120	2 252	22	2 304	1 778	62	9 914
	THUNDER BAY	821	71 288	178 888	1 336	14 947	80	10 676	0	0	2 729
	ONTARIO TOTAL	6 707	404 034	962 002	4 811	82 266	13 989	41 097	11 334	996	87 947

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

ASSESSMENT WORK RECORDED (IN DAYS)

YEAR	MINING DIVISION	MANUAL LABOUR	DIAMOND DRILLING	GEO-PHYSICAL SURVEYS	GEO-CHEMICAL SURVEYS	GEO-LOGICAL SURVEYS	LAND SURVEYS	POWER EQUIPMENT	BULLDOZER	ASSAYING	OTHER
1982	EASTERN ONTARIO	302	9 546	8 372	1 414	481	0	5 851	733	0	627
	KENORA	1 074	23 524	26 270	5 765	5 330	0	368	2 553	0	3 554
	LARDER LAKE	3 062	99 526	133 511	1 222	17 926	1 200	17 455	319	134	39 335
	PATRICIA	48	35 329	73 486	7 163	13 980	14 770	4 019	3 099	0	15 465
	PORCUPINE	1 585	91 203	359 970	2 067	36 178	300	21 865	9 134	543	73 252
	RED LAKE	206	23 967	79 662	0	6 787	0	3 259	16	0	4 878
	SAULT STE MARIE	223	2 760	67 833	9	3 568	48	4 663	2 167	52	432
	SUDBURY	1 047	19 719	35 557	1 126	7 374	2	1 666	2 202	1 350	80
	THUNDER BAY	1 246	133 035	114 805	5 322	24 437	1 840	9 120	0	0	2 468
	ONTARIO TOTAL	8 793	438 609	899 466	24 088	116 061	18 160	68 266	20 223	2 079	140 091
1983	EASTERN ONTARIO	211	8 317	2 840	0	3 135	0	445	1 805	24	2 547
	KENORA	483	35 746	42 221	2 440	12 006	0	1 309	3 905	0	8 287
	LARDER LAKE	4 929	121 212	98 366	4 940	15 233	200	10 023	123	630	49 114
	PATRICIA	1 080	69 569	83 537	5 736	23 738	0	0	3 762	93	9 708
	PORCUPINE	1 528	128 126	199 892	3 683	44 755	0	28 013	910	254	0
	RED LAKE	609	18 672	22 035	1 960	3 468	0	252	225	0	5 986
	SAULT STE MARIE	6 812	19 299	624 560	1 435	8 142	58	2 503	244	182	1 435
	SUDBURY	1 150	17 574	12 676	385	4 040	4	818	3 100	1 161	783
	THUNDER BAY	971	113 555	439 993	24 352	64 789	4 274	6 816	0	0	10 141
	ONTARIO TOTAL	17 773	532 070	1 526 120	44 931	179 306	4 536	50 179	14 074	2 344	88 001

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

ASSESSMENT WORK RECORDED (IN DAYS)

YEAR	MINING DIVISION	MANUAL LABOUR	DIAMOND DRILLING	GEO-PHYSICAL SURVEYS	GEO-CHEMICAL SURVEYS	GEO-LOGICAL SURVEYS	LAND SURVEYS	POWER EQUIPMENT	BULLDOZER	ASSAYING	OTHER
1984	EASTERN ONTARIO	120	9 928	23 500	20	322	0	1 539	1 184	37	886
	KENORA	867	36 055	281 359	7 319	23 670	40	1 290	3 185	0	10 907
	LARDER LAKE	2 397	93 946	245 542	4 894	44 113	1 240	19 615	12	1 064	60 997
	PATRICIA	224	42 425	113 830	2 812	24 941	1 880	1 045	303	98	17 656
	PORCUPINE	1 586	140 864	495 323	9 288	51 723	0	9 994	4 411	0	24 849
	RED LAKE	327	32 482	78 538	2 009	12 495	0	0	726	53	2 034
	SAUL STE MARIE	230	31 388	605 200	11 459	12 558	9	684	1 219	171	29 263
	SUDBURY	1 201	49 516	23 652	120	3 541	0	2 220	951	909	935
	THUNDER BAY	1 105	142 459	551 864	64 978	90 108	5 130	20 258	0	0	47 076
	ONTARIO TOTAL	8 057	579 063	2 418 808	102 899	263 471	8 299	56 645	11 991	2 332	194 603
1985	EASTERN ONTARIO	335	15 619	3 192	880	650	80	939	0	0	3 703
	KENORA	666	55 090	185 148	6 063	29 765	1 000	525	3 998	0	11 345
	LARDER LAKE	3 101	95 076	276 646	6 808	19 517	0	13 769	0	502	44 984
	PATRICIA	314	92 051	148 105	7 423	20 377	1 640	560	335	272	16 391
	PORCUPINE	741	131 330	278 881	7 866	34 032	200	5 067	2 943	225	42 053
	RED LAKE	155	42 000	200 968	2 498	16 642	1 140	1 047	0	6	6 180
	SAULT STE MARIE	366	45 617	87 246	17 546	36 156	0	11 224	0	0	21 052
	SUDBURY	1 638	25 873	56 894	220	1 717	1 340	1 820	2 922	13	2 104
	THUNDER BAY	1 841	170 023	475 737	26 208	65 802	3 160	13 309	0	0	35 547
	ONTARIO TOTAL	9 157	672 679	1 712 817	75 512	224 658	8 560	48 260	10 198	1 018	183 359

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

ASSESSMENT WORK RECORDED (IN DAYS)

YEAR	MINING DIVISION	MANUAL LABOUR	DIAMOND DRILLING	GEO-PHYSICAL SURVEYS	GEO-CHEMICAL SURVEYS	GEO-LOGICAL SURVEYS	LAND SURVEYS	POWER STRIPPING	ASSAYING	OTHER
1986	EASTERN ONTARIO	616	15 829	3 623	2 289	3 843	0	923	0	5 476
	KENORA	195	64 097	47 884	4 046	9 698	0	4 963	0	11 762
	LARDER LAKE	2 524	107 109	399 512	1 756	48 264	1 330	21 280	95	49 170
	PATRICIA	349	109 952	263 118	9 207	29 245	790	841	241	15 737
	PORCUPINE	1 021	129 932	481 547	5 362	26 266	0	26 490	205	46 699
	RED LAKE	574	48 325	127 445	3 463	6 360	440	675	203	2 148
	SAULT STE MARIE	105	59 323	27 638	13 752	18 328	0	4 574	210	7 233
	SUDBURY	2 094	22 017	14 350	110	1 658	60	1 409	0	8 122
	THUNDER BAY	1 372	110 246	281 786	7 207	24 770	1 400	16 273	356	19 362
	ONTARIO TOTAL	8 850	666 830	1 646 903	47 192	168 432	4 020	77 428	1 310	165 709

YEAR	MINING DIVISION	MANUAL LABOUR	DIAMOND DRILLING	GEO-PHYSICAL SURVEYS	GEO-CHEMICAL SURVEYS	GEO-LOGICAL SURVEYS	LAND SURVEYS	ROCK DRILLS & OTHER POWER EQUIPMENT	CORE SPECIMENS	ASSAYS, MINERA-LOGICAL STUDIES	SHAFT SINKING	OTHER
1987	KENORA	1 202	86 321	153 077	6 855	12 068	0	6 807	5	10 327	0	0
	LARDER LAKE	1 111	197 727	319 836	1 363	17 872	1 324	21 722	125	38 790	256	96
	PATRICIA	44	255 334	345 748	23 509	49 750	11 560	1 452	60	4 125	0	0
	PORCUPINE	1 013	120 384	612 631	637	32 001	0	20 285	167	20 159	0	0
	RED LAKE	258	81 854	138 443	5 880	23 440	0	2 029	0	9 837	0	0
	SAULT STE MARIE	669	54 720	224 756	7 377	10 349	0	30 585	162	21 223	480	0
	SOUTHERN ONT	572	6 672	24 592	805	5 721	280	1 895	43	1 757	0	0
	SUDBURY	1 930	16 266	43 721	590	3 467	0	6 744	0	3 434	889	0
	THUNDER BAY	833	205 369	724 924	9 165	54 632	3 160	38 001	392	33 738	0	0
	ONTARIO TOTAL	7 632	1 024 647	2 587 728	56 181	209 300	16 324	129 520	954	143 390	1 625	96

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

SMELTING AND REFINING OF METALLIC MINERALS MINED IN ONTARIO

SMELTING OF METALLIC MINERALS MINED IN ONTARIO

MINERAL COMMODITY	YEAR	UNIT OF VOLUME	ONT. MINE PRODUCTION	ONT. MINE PRODUCTION SMELTED IN ONTARIO	ONT. MINE PRODUCTION SMELTED IN ONTARIO AS A % OF ONT. MINE PRODUCTION	ONT. MINE PRODUCTION SMELTED OUTSIDE OF CANADA AS A % OF ONT. MINE PRODUCTION
CADMIUM	1980	TONNE	779	467	59.9	11.2
	1981		609	483	79.3	5.7
	1982		549	460	83.8	1.3
	1983		668	429	64.2	1.5
	1984		834	623	74.7	.5
	1985		848	626	73.8	.0
	1986		760	595	78.3	.0
CALCIUM	1980	TONNE	531	531	100.0	.0
	1981		469	469	100.0	.0
	1982		329	329	100.0	.0
	1983		399	399	100.0	.0
	1984		515	515	100.0	.0
	1985		739	739	100.0	.0
	1986		312	312	100.0	.0
COBALT	1980	TONNE	1 686	1 686	100.0	.0
	1981		1 831	1 831	100.0	.0
	1982		966	966	100.0	.0
	1983		1 025	1 025	100.0	.0
	1984		1 614	1 614	100.0	.0
	1985		1 731	1 731	100.0	.0
	1986		2 012	2 012	100.0	.0
COPPER	1980	TONNE	245 024	146 582	59.8	.2
	1981		226 385	136 290	60.2	.4
	1982		157 849	86 476	54.8	.4
	1983		226 796	150 478	66.3	.1
	1984		292 423	218 495	74.7	2.4
	1985		278 540	213 565	76.7	1.4
	1986		264 413	206 384	78.1	1.2

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

SMELTING OF METALLIC MINERALS MINED IN ONTARIO

MINERAL COMMODITY	YEAR	UNIT OF VOLUME	ONT. MINE PRODUCTION	ONT. MINE PRODUCTION SMELTED IN ONTARIO	ONT. MINE PRODUCTION SMELTED IN ONTARIO AS A % OF ONT. MINE PRODUCTION	ONT. MINE PRODUCTION SMELTED OUTSIDE OF CANADA AS A % OF ONT. MINE PRODUCTION
GOLD	1980	G	18 498 000	15 537 000	84.0	6.4
	1981		18 308 000	15 527 000	84.8	7.1
	1982		20 136 000	17 707 000	87.9	3.3
	1983		23 260 000	20 650 000	88.8	3.9
	1984		27 821 000	21 479 000	77.2	11.9
	1985		31 600 000	26 598 000	84.2	10.1
	1986		46 141 000	30 740 000	66.6	7.6
IRON ORE	1980	TONNE	6 569 132	5 449 228	83.0	17.0
	1981		5 394 620	5 365 708	99.5	.5
	1982		3 650 257	3 593 517	98.4	1.6
	1983		3 815 699	3 641 085	95.4	4.6
	1984		4 550 660	4 550 660	100.0	.0
	1985		4 327 584	4 327 158	100.0	.0
	1986		3 459 128	3 448 436	99.7	.0
LEAD	1980	TONNE	8 960	392	4.4	33.8
	1981		3 384	1 267	37.4	58.6
	1982		5 697	3 238	56.8	35.2
	1983		6 544	2 502	38.2	.0
	1984		8 931	5 104	57.1	39.2
	1985		3 819	2 333	61.1	32.4
	1986		6 065	1 971	32.5	58.2
MAGNESIUM	1980	TONNE	9 252	9 252	100.0	.0
	1981		8 548	8 548	100.0	.0
	1982		7 630	7 630	100.0	.0
	1983		5 980	5 980	100.0	.0
	1984		7 588	7 588	100.0	.0
	1985		8 446	8 446	100.0	.0
	1986		8 748	8 748	100.0	.0

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

SMELTING OF METALLIC MINERALS MINED IN ONTARIO

MINERAL COMMODITY	YEAR	UNIT OF VOLUME	ONT. MINE PRODUCTION	ONT. MINE PRODUCTION SMELTED IN ONTARIO	ONT. MINE PRODUCTION SMELTED IN ONTARIO AS A % OF ONT. MINE PRODUCTION	ONT. MINE PRODUCTION SMELTED OUTSIDE OF CANADA AS A % OF ONT. MINE PRODUCTION
NICKEL	1980	TONNE	145 607	145 607	100.0	.0
	1981		130 269	130 269	100.0	.0
	1982		63 956	63 956	100.0	.0
	1983		88 292	88 292	100.0	.0
	1984		132 442	132 442	100.0	.0
	1985		131 035	131 035	100.0	.0
	1986		121 851	121 851	100.0	.0
PLATINUM GROUP	1980	KG	12 776	12 394	97.0	.0
	1981		11 905	11 737	98.6	.0
	1982		7 105	7 025	98.9	.0
	1983		6 964	6 964	100.0	.0
	1984		10 245	10 245	100.0	.0
	1985		11 594	11 594	100.0	.0
	1986		10 927	10 927	100.0	.0
SILVER	1980	KG	461 027	79 997	17.4	12.3
	1981		328 779	72 156	21.9	18.2
	1982		346 974	93 030	26.8	22.6
	1983		414 696	75 369	18.2	11.8
	1984		516 526	105 695	20.5	15.2
	1985		430 094	190 599	44.3	8.0
	1986		361 537	133 726	37.0	13.4
ZINC	1980	TONNE	253 329	101 483	40.1	28.8
	1981		246 031	109 184	44.4	25.2
	1982		260 544	105 628	40.5	27.4
	1983		274 819	99 547	36.2	27.0
	1984		294 131	121 626	41.4	27.8
	1985		266 938	127 731	47.9	22.3
	1986		285 452	126 934	44.5	20.1

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

REFINING OF METALLIC MINERALS MINED IN ONTARIO

MINERAL COMMODITY	YEAR	UNIT OF VOLUME	ONT. MINE PRODUCTION	ONT. MINE PRODUCTION REFINED IN ONTARIO	ONT. MINE PRODUCTION REFINED IN ONTARIO AS A % OF ONT. MINE PRODUCTION	ONT. MINE PRODUCTION REFINED OUTSIDE OF CANADA AS A % OF ONT. MINE PRODUCTION
CADMIUM	1980	TONNE	779	467	59.9	11.2
	1981		609	483	79.3	5.7
	1982		549	460	83.8	1.3
	1983		668	429	64.2	1.5
	1984		834	623	74.7	.5
	1985		848	626	73.8	.0
	1986		760	595	78.3	.0
CALCIUM	1980	TONNE	531	531	100.0	.0
	1981		469	469	100.0	.0
	1982		329	329	100.0	.0
	1983		399	399	100.0	.0
	1984		515	515	100.0	.0
	1985		739	739	100.0	.0
	1986		312	312	100.0	.0
COBALT	1980	TONNE	1 686	781	46.3	53.7
	1981		1 831	785	42.9	57.1
	1982		966	400	41.4	58.6
	1983		1 025	326	31.8	68.1
	1984		1 614	859	53.2	46.8
	1985		1 731	934	54.0	46.1
	1986		2 012	1 056	52.5	38.4
COPPER	1980	TONNE	245 024	122 299	49.9	10.1
	1981		226 385	114 037	50.4	10.2
	1982		157 849	73 715	46.7	8.5
	1983		226 796	128 229	56.5	10.0
	1984		292 423	190 298	65.1	12.1
	1985		278 540	188 239	67.6	10.5
	1986		264 413	186 710	70.6	8.7

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

REFINING OF METALLIC MINERALS MINED IN ONTARIO

MINERAL COMMODITY	YEAR	UNIT OF VOLUME	ONT. MINE PRODUCTION	ONT. MINE PRODUCTION REFINED IN ONTARIO	ONT. MINE PRODUCTION REFINED IN ONTARIO AS A % OF ONT. MINE PRODUCTION	ONT. MINE PRODUCTION REFINED OUTSIDE OF CANADA AS A % OF ONT. MINE PRODUCTION
GOLD	1980	G	18 498 000	15 537 000	84.0	6.4
	1981		18 308 000	15 527 000	84.8	7.1
	1982		20 136 000	17 707 000	87.9	3.3
	1983		23 260 000	20 650 000	88.8	3.9
	1984		27 821 000	21 479 000	77.2	11.9
	1985		31 600 000	26 598 000	84.2	10.1
	1986		46 141 000	30 740 000	66.6	7.6
IRON ORE	1980	TONNE	6 569 132	5 449 228	83.0	17.0
	1981		5 394 620	5 365 708	99.5	.5
	1982		3 650 257	3 593 517	98.4	1.6
	1983		3 815 699	3 641 085	95.4	4.6
	1984		4 550 660	4 550 660	100.0	.0
	1985		4 327 584	4 327 158	100.0	.0
	1986		3 459 128	3 448 436	99.7	.0
LEAD	1980	TONNE	8 960	0	.0	38.2
	1981		3 384	0	.0	96.1
	1982		5 697	0	.0	92.0
	1983		6 544	0	.0	38.2
	1984		8 931	0	.0	96.4
	1985		3 819	0	.0	93.5
	1986		6 065	0	.0	90.7
MAGNESIUM	1980	TONNE	9 252	9 252	100.0	.0
	1981		8 548	8 548	100.0	.0
	1982		7 630	7 630	100.0	.0
	1983		5 980	5 980	100.0	.0
	1984		7 588	7 588	100.0	.0
	1985		8 446	8 446	100.0	.0
	1986		8 748	8 748	100.0	.0

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

REFINING OF METALLIC MINERALS MINED IN ONTARIO

MINERAL COMMODITY	YEAR	UNIT OF VOLUME	ONT. MINE PRODUCTION	ONT. MINE PRODUCTION REFINED IN ONTARIO	ONT. MINE PRODUCTION REFINED IN ONTARIO AS A % OF ONT. MINE PRODUCTION	ONT. MINE PRODUCTION REFINED OUTSIDE OF CANADA AS A % OF ONT. MINE PRODUCTION
NICKEL	1980	TONNE	145 607	96 814	66.5	32.7
	1981		130 269	77 389	59.4	40.6
	1982		63 956	42 035	65.7	35.2
	1983		88 292	53 205	60.3	43.6
	1984		132 442	77 138	58.2	42.0
	1985		131 035	74 057	56.5	43.6
	1986		121 851	60 987	50.1	40.4
PLATINUM GROUP	1980	KG	12 776	0	.0	100.0
	1981		11 905	0	.0	100.0
	1982		7 105	0	.0	100.0
	1983		6 964	0	.0	100.0
	1984		10 245	0	.0	100.0
	1985		11 594	0	.0	100.0
	1986		10 927	0	.0	99.6
SILVER	1980	KG	461 027	71 029	15.4	14.2
	1981		328 779	60 733	18.5	21.7
	1982		346 974	92 444	26.6	22.8
	1983		414 696	67 978	16.4	13.5
	1984		516 526	105 695	20.5	15.2
	1985		430 094	190 599	44.3	8.0
	1986		361 537	74 289	20.5	13.4
ZINC	1980	TONNE	253 329	101 483	40.1	28.8
	1981		246 031	109 184	44.4	25.2
	1982		260 544	105 628	40.5	27.4
	1983		274 819	99 547	36.2	27.0
	1984		294 131	121 626	41.4	27.8
	1985		266 938	127 731	47.9	22.3
	1986		285 452	126 934	44.5	20.1

SOURCE: ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES, MINERAL ANALYSIS & STATISTICS SECTION

APPENDIX

CONVERSION FACTORS USED TO CONVERT CURRENT DOLLARS TO 1971 DOLLARS

YEAR	CONVERSION FACTOR	
1966	82.70000	
1967	85.90000	
1968	88.70000	
1969	92.70000	
1970	96.80000	
1971	100.00000	<------------------
1972	104.90000	
1973	113.70000	
1974	129.40000	
1975	146.50000	
1976	160.40000	
1977	171.70000	
1978	182.70000	
1979	200.70000	
1980	222.70000	
1981	246.30000	
1982	274.20000	
1983	290.50000	
1984	301.20000	
1985	313.50000	
1986	329.20000	
1987	342.40000	

SOURCE: STATISTICS CANADA PUBLICATION 11-003

METRIC CONVERSION FACTORS USED IN THIS REPORT

MINERAL COMMODITY	IMPERIAL UNIT		METRIC UNIT
ANTIMONY	POUNDS	= .45359	KILOGRAMS
ASBESTOS BARITE	SHORT TONS	= .90718	TONNES
BERYLLIUM BISMUTH CADMIUM CALCIUM	POUNDS	= .45359	KILOGRAMS
CEMENT CHROMITE	SHORT TONS	= .90718	TONNES
COAL	SHORT TONS	= .90718	TONNES
COBALT COLUMBIUM(CB2O5) COPPER	POUNDS	= .45359	KILOGRAMS
FLUORSPAR GEMSTONES	SHORT TONS	= .90718	TONNES
GOLD	TROY OUNCES	=31.10347	GRAMS
GYPSUM IRON ORE	SHORT TONS	= .90718	TONNES
LEAD	POUNDS	= .45359	KILOGRAMS
LIME	SHORT TONS	= .90718	TONNES
MAGNESIUM	POUNDS	= .45359	KILOGRAMS
MAGNESITIC DOLOMITE	SHORT TONS	= .90718	TONNES
MICA MOLYBDENUM	POUNDS	= .45359	KILOGRAMS
NATURAL GAS	M CU FEET	= 28.316	K CU METRE
NATURAL GAS BY-PROD.	CUBIC FEET	= .02831	CUBIC METRES
NEPHELINE SYENITE	SHORT TONS	= .90718	TONNES

SOURCE: CANADIAN STANDARDS ASSOCIATION

METRIC CONVERSION FACTORS USED IN THIS REPORT

MINERAL COMMODITY	IMPERIAL UNIT		METRIC UNIT
NICKEL	POUNDS	= .45359	KILOGRAMS
PALLADIUM	TROY OUNCES	= .03110	KILOGRAMS
PEAT	SHORT TONS	= .90718	TONNES
PETROLEUM	BARRELS	= .15898	CU METRE
PLATINUM PLATINUM GROUP	TROY OUNCES	= .03110	KILOGRAMS
POTASH PYRITE PYRRHOTITE QUARTZ SALT SAND & GRAVEL	SHORT TONS	= .90718	TONNES
SELENIUM	POUNDS	= .45359	KILOGRAMS
SILVER	TROY OUNCES	= .03110	KILOGRAMS
SOAPSTONE,TALC SODIUM SULPHATE STONE SULPHUR	SHORT TONS	= .90718	TONNES
TANTALUM(TA2O5) TELLURIUM THORIUM TIN	POUNDS	= .45359	KILOGRAMS
TITANIUM DIOXIDE	SHORT TONS	= .90718	TONNES
TUNGSTEN(WO3) URANIUM(U) YTTRIUM(Y2O3) ZINC	POUNDS	= .45359	KILOGRAMS

SOURCE: CANADIAN STANDARDS ASSOCIATION

* AVERAGE PRICE IN CANADA

MINERAL COMMODITY	UNIT	CANADIAN DOLLARS	
		1987P	1986R
BISMUTH	KG	10.611	9.242
CADMIUM	KG	5.811	3.823
CALCIUM	KG	11.255	12.009
CEMENT	TONNE	79.969	73.655
COAL	TONNE	27.346	29.854
COBALT(SHOT/CATHODE)	KG	20.463	34.436
COBALT(US SPOT CATH)	KG	18.920	22.849
COLUMBIUM	KG	7.597	7.963
COPPER	KG	2.422	2.042
GOLD	G	19.034	16.417
GYPSUM	TONNE	9.977	9.437
INDIUM	KG	313.341	118.604
IRIDIUM	KG	21 901.860	26 802.470
IRON ORE	TONNE	33.399	37.126
LEAD	KG	1.058	.681
LIME	TONNE	78.336	67.211
MAGNESIUM	KG	4.473	4.687
MOLYBDENUM(OXIDE)	KG	8.475	8.794
NATURAL GAS	K CU M	59.902	78.229
NEPHELINE SYENITE	TONNE	42.894	42.500
NICKEL	KG	6.984	5.946
OSMIUM	KG	26 962.516	31 218.375
PALLADIUM	KG	6 394.687	5 833.785
PEAT	TONNE	114.422	108.607
PETROLEUM CRUDE	CU M	137.676	112.462
PLATINUM	KG	25 578.812	23 190.719
RHODIUM	KG	52 862.836	53 362.973
RUTHENIUM	KG	2 975.487	3 279.858
SALT	TONNE	22.870	23.193
SAND & GRAVEL	TONNE	2.802	2.631
SELENIUM	KG	18.939	17.141
SILVER	KG	308.422	252.769
STONE	TONNE	5.181	5.007
SULPHUR	TONNE	96.740	120.412
TANTALUM	KG	60.050	55.162
TIN	KG	9.276	9.008
URANIUM(U)	KG	84.919	90.622
ZINC	KG	1.274	1.215

* BASED ON AVERAGE OF 12 MONTHS

SOURCE: ENERGY MINES AND RESOURCES AND ONTARIO MINISTRY OF NORTHERN DEVELOPMENT AND MINES
MINERAL ANALYSIS & STATISTICS SECTION

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